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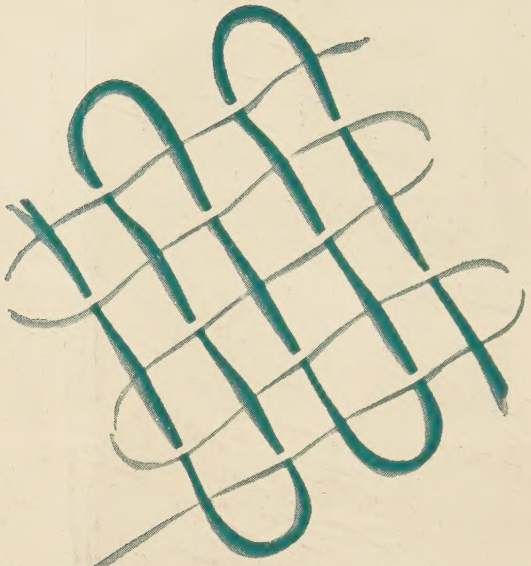

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JANUARY, 1947

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New York University Medical Care Expansion

The changing requirements of New York City in respect to medical care were commented upon by Dean Currier McEwen, of the New York University College of Medicine in his annual report on the work of that institution.

Drawing upon the records of the college's medical staff covering their services at Bellevue Hospital and at the university's sixty year old east side clinic, Dean McEwen cited a decline during the year, of the number of destitute sick requiring medical care in the midtown, eastside area, while at the same time there was an evident increasing need for augmented medical services for wage earners and low income groups.

"Seventy-five percent of the medical service given at Bellevue Hospital, is under the direction of the faculty and the physicians associated with the College of Medicine," the dean added. "This means that during the past year, the college staff was responsible for the medical care of some 45,000 bed patients at Bellevue, as well as for supervising the medical care given in more than 250,000 out-patients' visits at the city hospitals.

The need for a rounded medical service for wage earners and low income groups is becoming increasingly urgent.

To meet requirements for medical service for the small income groups, the University Clinic is taking steps to offer an all-around medical service to the wage earner at a low cost. As outlined by the dean, the University Clinic will be reorganized as a medical group composed of members of the faculty serving full or part time for the purpose of offering complete medical services at moderate fees for those who wish it. Students at the College of Medicine, the dean pointed out, will also benefit through these augmented services by gaining first-hand experience with self-supporting patients, in addition to their work with the indigent sick at Bellevue Hospital.

Plans for the expansion of the University's clinical services are incorporated in the proposed New York University-Bellevue Medical Center.

A new University Hospital featuring moderately priced private rooms will be erected on this location. The New York Eye and Ear Infirmary, the third oldest hospital of any kind in the city, will also be affiliated with the new medical center, maintaining its separate identity but supplementing the clinical facilities offered by the university. Also associated with the University Clinic will be the new Institute of Rehabilitation and Physical Medicine recently announced by the College of Medicine; with Dr. Howard Rusk, who headed the Air Forces rehabilitation program, in charge.

Bellevue Hospital and the University College of Medicine have been in close association for nearly one hundred years, it was pointed out, and the plans for their continued association in the new East Side

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Medical Center is a logical outgrowth of this relationship. It is anticipated that the university's new facilities will make possible the expansion of its services to Bellevue Hospital.

A summary was made in the dean's report of the research projects undertaken by the College of Medicine's staff during the war. Among these were mentioned the work of Dr. Colin MacLeod, professor of bacteriology, which has led to the discovery of a means of immunization against four types of pneumonia through the administration of small amounts of hydrocarbonates, which were extracted from the capsules of four pneumococci. Other research studies by faculty members during the year included work by Dr. Frank W. CoTui on new methods for treating peptic ulcers with protein elements; and extensive research into the treatment of malaria by Dr. James H. Shannon.

Nine departments of the college, Dean McEwen stated, carried on projects under contracts during the war period with the Office of Scientific Research and Development, the United States Public Health Service and the Army and the Navy. This research was related to new methods for the study of traumatic shock, methods of treating malaria with atabrine, the treatment of venereal disease and gas gangrene.

Initiated for the welfare of the armed forces, these research projects will inevitably have a beneficial effect on civilian health, Dean McEwen concluded.

New Vitamins

Recent progress in the search for new vitamins was reported to the American Chemical Society's biological division by Dr. Thomas H. Jukes, Lederle Laboratories, Pearl River, N. Y., who said that science is now on the trail of at least six unidentified vitamins. One of these, he explained, is the factor in liver which prevents pernicious anemia. Another, is a factor which has been isolated from sugar-cane juice and which protects guinea pigs from a tendency to develop stiffness of the joints, but is not known to have any effect on other animals.

Other unidentified vitamins listed by Dr. Jukes included a factor called strepogenin, found in some proteins, which stimulates the growth of mice; a substance called Factor X which is obtained from liver and is necessary for the growth of rats on a purified diet; a factor present in liver, fish meal and cow manure which is needed by chickens for growth and the ability to hatch when they are on a yellow corn meal and soybean diet, and a factor called licocaic, found in the pancreas, which prevents a fatty liver in rats and dogs.

Whether these unidentified vitamins have any effects on human beings, cannot be determined until they have been isolated and obtained in large enough quantities for clinical tests, Dr. Jukes explained.

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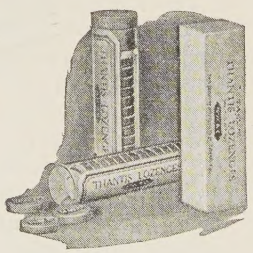

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Open Forum

If The Customers Weaken!

T. SWANN HARDING
Falls Church, Va.

It's a great life, if the customers weaken; and they do.

The Food and Drug Administration have recently celebrated the fortieth anniversary of its Food and Drugs Act of 1906. It took place in New York City the 25th of June, and the festivities lasted all day. The President sent a congratulatory message and various members of Congress sent their regards or appeared in person. Federal Security Administrator Watson B. Miller reviewed the turbulent period which culminated in the enactment of the first food and drug act. Mrs. Harvey W. Wiley spoke about her distinguished husband.

Dr. Wiley and the subsequent administrators of the law—Dr. Carl L. Alsberg (deceased), Walter G. Campbell, and Paul B. Dunbar, the incumbent, were all long-time employees of the Department of Agriculture before the Food and Drug Administration left it in 1940 for the Federal Security Agency; therefore Secretary of Agriculture Clinton P. Anderson also sent greetings. In 1938, the Food, Drug, and Cosmetic Act was passed which went into effect in 1940, and competently plugged many loopholes in the earlier law. However, you just can't get away from the fact that it's still great fun when the customer weakens, and the customer still shows such a deplorable tendency to weaken. What sort of things have been happening recently in the field of operations covered by the Food and Drug Administration?

A Cincinnati gentleman was recently compelled to suspend and liquidate his business as a shipper of misbranded medicines, when the court learned that he was neither chemist nor pharmacist, and that he had no specialized training in medicine. His gift to mankind was Sano, a laxative tonic bearing claims for rheumatism, constipation, and kindred ailments. Even the fact that his customers did not like the labels the law compelled him to affix was ignored in the action taken.

A Minnesota expert in all things was forced to desist from selling his sure cure for blackhead disease of turkeys and other turkey ailments. He was working on a hit-or-miss, mostly miss, formula, and had no training in chemistry or medicine. His preparation had all the therapeutic value of colored water, but was priced differently, of course. A company which had incorporated penicillin in lozenges was forced to quit selling this drug thus without prescription. A Missouri inspector reported that nine thousand pounds of unfit peanuts, fruits, melons, popcorn, nuts, fish, cereal products, cornmeal, glace fruits and several thousand cans of foodstuffs had had to be embargoed or destroyed in these times of tight food supply. The St. Louis station of the Administration, found a local company substituting cornmeal for poppy seed topping in bread duly labeled "Poppy seed bread".

Some citizen began to import, from one Dar-Ul-Shafa Golian in India, some delectable "Rejuvenation Pills" for which most bizarre claims were made. The label said in part: "Important. Please induce your other friends and relatives to make regular use of Rejuvenation Course and enjoy the real pleasures of life. After taking full course of twelve boxes of Rejuvenation Course it is advisable to continue it at frequent intervals . . . If you make a regular use of this wonderful tonic, you are sure to live for one hundred years enjoying perfect health." Not content with mere print, in English and in foreign tongues, the labels also bore the picture of a Hindu Adonis in a bathing suit to drive home the idea. It was decided, however, that we in the United States could struggle along somehow without this adjunct to energy, vim, vigor and vitality, but the customers would have bought it, rest assured, had it been made available here.

Magic yogurt cultures are still on the market. One popped up recently in Los Angeles, recommended to prolong life and vigor, to synthesize vitamin B in the human system, to kill putrefactive microbes, to treat chronic constipation, stomach ulcers, and other diseases—probably cancer and bad railroad accidents, as well as anything else. The accompanying literature, to make America yogurt-conscious, ranged from Metchnikoff's advocacy of Bulgarian lactobacilli to Gaylord Hauser's Glamour Diets. Among the testimonials was one from the *Book of Genesis* stating that Abraham himself offered this dish to his guests. Probably no remedy has ever done better than that in securing testimonials. The product also interested Genghis Khan and the Russian Khirghiz, from where it spread to the Balkans, the Trappists of Canada, and to the International Yogurt Co., which pleaded *nolo contendere*, took its fine, and went forth saddened into the cruel world.

Another California concern was fined for selling a contaminated lifeboat ration consisting of mixed raisins, nuts, apples and oil with vanilla flavoring added, packed in a three and one-half ounce tin, and heavily charged with rat feces, rat urine, and rat- and mouse-chewed apples. Dead rats were common appurtenances of the

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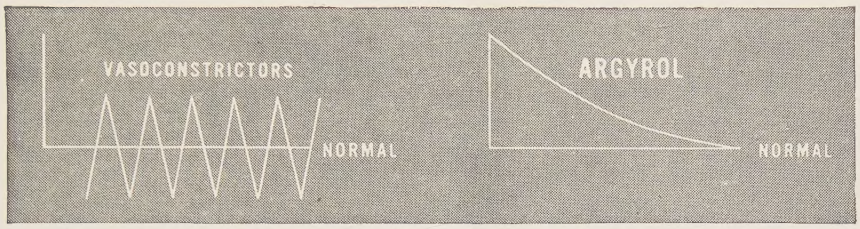

In the recent literature, reports are multiplying on the frequency of rebound congestion following use of many vasoconstrictors. This vicious circle of vasoconstriction and compensatory congestion is avoided with the use of ARGYROL, which produces no such effect; and restoration of normal function is more readily attained.

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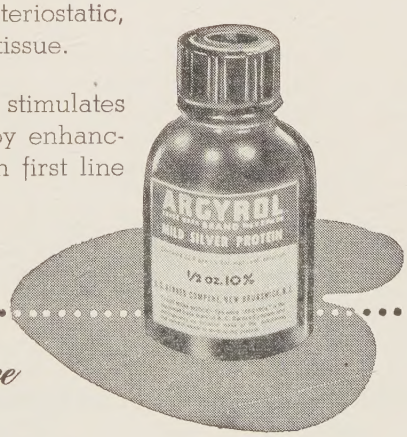

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plant where the product was made. A shortweight crabmeat fine and another fine for selling low-fat margarine, lead up to a discussion of some dirty macaroni and noodles. The makers, after being fined, asked if there was any kind of light one could place over a flour conveyor in order to eliminate rodent hairs and insects. It was explained that no such device had yet been perfected, though utlraviolet light had been and was used to detect the presence of urine in flour, an appetizing thought for those who wish to save on bread.

Various racketeers are still artificially coloring and flavoring cheap vegetable oils and passing them off for olive oil, that is, until caught. Sour and putrid frozen eggs are still offered for sale. Concerns are still baking bread and pastries in places woefully in need of a clean-up. Black rot still occurs periodically in Mexican pineapples. Rubbing alcohol is still being used as a beverage by persons with zinc-lined stomachs. Others gladly sell the customers beverages consisting of a sixty percent solution of isopropyl alcohol containing aromatics and color—to be served as a chaser at fifteen or fifty cents a drink, as the case might be. That will chase a man to the cemetery or morgue almost as quickly as anything else.

This should give you a rough idea of why we still have and need a food and drugs act. Fortunately the Federal act is enforced assiduously by individuals singularly high in integrity, who are largely dedicated to the public weal. As Federal Security Administrator Miller said at the Food and Drug celebration: "The laws of democracy cannot be static. Their purpose is to further the welfare of the people they govern. As new forces and new needs arise, our laws must adjust so as to best serve the purpose. Social legislation must be built upon the basic and cardinal principles established by the founders of the nation. It must serve the aim of creating conditions which still afford maximum freedom for the individual, consistent with just and equitable relations with others. President Lincoln once defined as ' . . . the legitimate objective of government—the doing for a community of people whatever they need to have done but cannot do so well for themselves in their separate and individual capacities.' The Federal Food, Drug and Cosmetic Act represents fulfillment of this function."

Granite Gables

Wartime Triumph Over Malaria

Professor Robert C. Elderfield, Columbia University, revealed recently, at a meeting of the New York section of the American Chemical Society at the Hotel Pennsylvania, that America owes her wartime triumph over malaria, largely to two powerful drugs discovered by German scientists who, ignorant of their worth, failed to make them available to Nazi troops.

While these drugs, chloroquin and oxychloroquin, made it relatively easy for the United States Army to suppress the disease in the field, the Germans relied throughout the war upon the much less effective atabrine to fight the ravages of malaria among their forces in Russia, Italy and Africa.

A third drug which American chemists developed by making improvements upon a German discovery, has recently been found to have greater curative powers than any other known antimalarial, according to Professor Elderfield, who said that the new agent, called pentaquin, has successfully cured more than 90 percent of the relapsing malaria infections on which it has been tried.

Pentaquin not only is more potent than its German predecessor, plasmochin, or pamaquin, but it is less toxic. Although plasmochin, when administered in conjunction with quinine, can permanently cure about 80 percent of relapsing vivax malaria infections, he explained, it is excessively toxic and is of little use in treating members of non-Caucasian races, among whom it tends to cause a form of anemia.

Only three cases of anemia have been recorded among the more than two hundred malaria victims treated with pentaquin so far, Professor Elderfield reported, emphasizing that the final determination of pentaquin's value must await further tests.

Chemists are now seeking related drugs even less toxic than pentaquin, he stated, and several compounds of this type "hold as great, or greater promise."

Pentaquin, chloroquin, oxychloroquin and the other new antimalarials were made available as the result of a wartime research program which constituted the greatest mass attack on a therapeutic problem in all history. In the search for quinine substitutes superior to atabrine, which had definite disadvantages, he said, "approximately 15,000 drugs, natural products and old wives' remedies were examined." About one-third of these compounds were synthesized especially for the purpose, he explained, and the rest came from the shelves of industrial and university laboratories.

Chloroquin and oxychloroquin, which were numbered 7618 and 8137, respectively, in the survey, had originally been reported in German patent literature, but it was not until they were tested by American researchers that their antimalarial value was realized. Chloroquin is inherently more active than atabrine, it does not stain the skin as atabrine does and does not cause gastrointestinal upsets as atabrine occasionally does. Professor Elderfield further added that a single weekly dose of chloroquin will suppress malaria in the field, while atabrine must be administered daily.

The minimum total suppressive dose of chloroquin is considerably smaller than that of atabrine, and chloroquin will promptly terminate an acute attack of the form of the disease, known as falciparum malaria, when administered by mouth, whereas atabrine must be given intramuscularly for this purpose. At present, he said, chloroquin appears slightly superior to oxychloroquin, but experience with the latter is not so extensive as with chloroquin.

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Mental Hygiene Program

The accelerated schedule of child guidance clinics conducted by the New York State Department of Mental Hygiene promises to set a new high in the state's program of prevention of mental disease, according to Dr. Donald W. Cohen, chief child guidance psychiatrist of the department. Speaking before the New York State Conference on Social Work, at the Hotel Pennsylvania in New York, Dr. Cohen described the department's prewar and wartime prevention activities, and outlined its program for the future.

"Prior to 1941," Dr. Cohen reported, "the division of prevention conducted approximately one hundred and fifty clinics a month. During the recent war years the number of clinics dropped to about one hundred a month due to a loss of personnel in the state hospitals and state schools to the armed forces."

This wartime retrenchment altered the type of preventive work done at the clinics, Dr. Cohen pointed out. Because of the infrequency of the clinics, he said, the service became mainly diagnostic in nature rather than therapeutic, since the children could not be seen often enough for intensive therapy.

The legislature has this year allotted so marked an increase in funds for this aspect of the state's mental hygiene program, that the vitally needed additions are now being made to the staff of the division of prevention. Within the past few months it has been possible to increase the number of clinic teams from four to eight, the new teams being established at Utica, Newburgh, Syracuse and Jamestown. By January two more teams will be in operation, and when the full anticipated staff has been obtained, a total of eleven complete child guidance teams will be in the field, each team comprising a psychiatrist, a psychologist, two psychiatric social workers and a clerk.

"Already the ground lost during war years has been made up," Dr. Cohen stated, "and the postwar figure of one hundred fifty clinic days a month has been surpassed. Today we are offering one hundred and seventy clinic days a month and this figure will grow as personnel is added. When our program is in full swing, three hundred and fifty clinic days a month will be available for child guidance work."

Prior to the inauguration of the expanded clinic program, treatment and follow-up were mainly delegated to local workers and agencies. It was explained that in view of the vital need for specialized therapy and to lighten the burden on local authorities, the present policy is to place this treatment and follow-up in the hands of the clinic team. Local workers will continue to participate in this program on a coordinated basis but will be relieved of the responsibility, which will be taken over by the psychiatrists and the social workers of the division of prevention.

The clinic teams will be located in key centers throughout the state, namely, Albany, Utica, Syracuse, Rochester, Buffalo, Binghamton, Newburgh, Jamestown and Ogdensburg.

Toward a Better World

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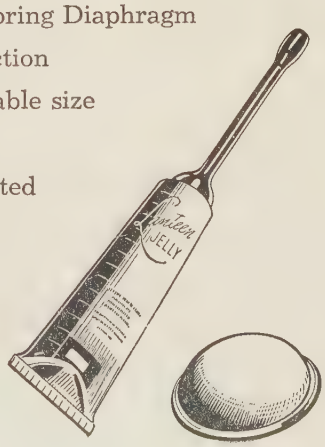

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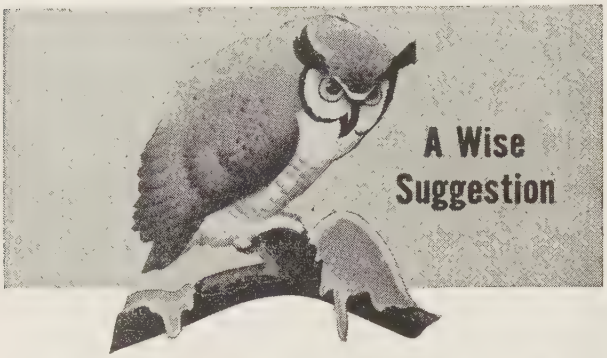

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Home Town Medical Care

Dr. Paul R. Hawley, medical director of the Veterans Administration, recently explained the extent of the medical services which may be rendered to veterans under the Veteran Administration's home-town medical care program.

Under existing legislation, veterans may be furnished outpatient medical or dental treatment in Veterans Administration clinics, in private offices of physicians or dentists or in their own homes only for disabilities recognized by the Veterans Administration as incurred or aggravated in the line of duty in active service.

He added that only prescriptions for service-connected disabilities may be filled at government expense by local pharmacies under the Veterans Administration's home-town prescription service. The medical facilities of the Veterans Administration regional and subregional offices, clinics and hospitals, under law must be utilized to the fullest extent for examination and out-patient treatment of veterans.

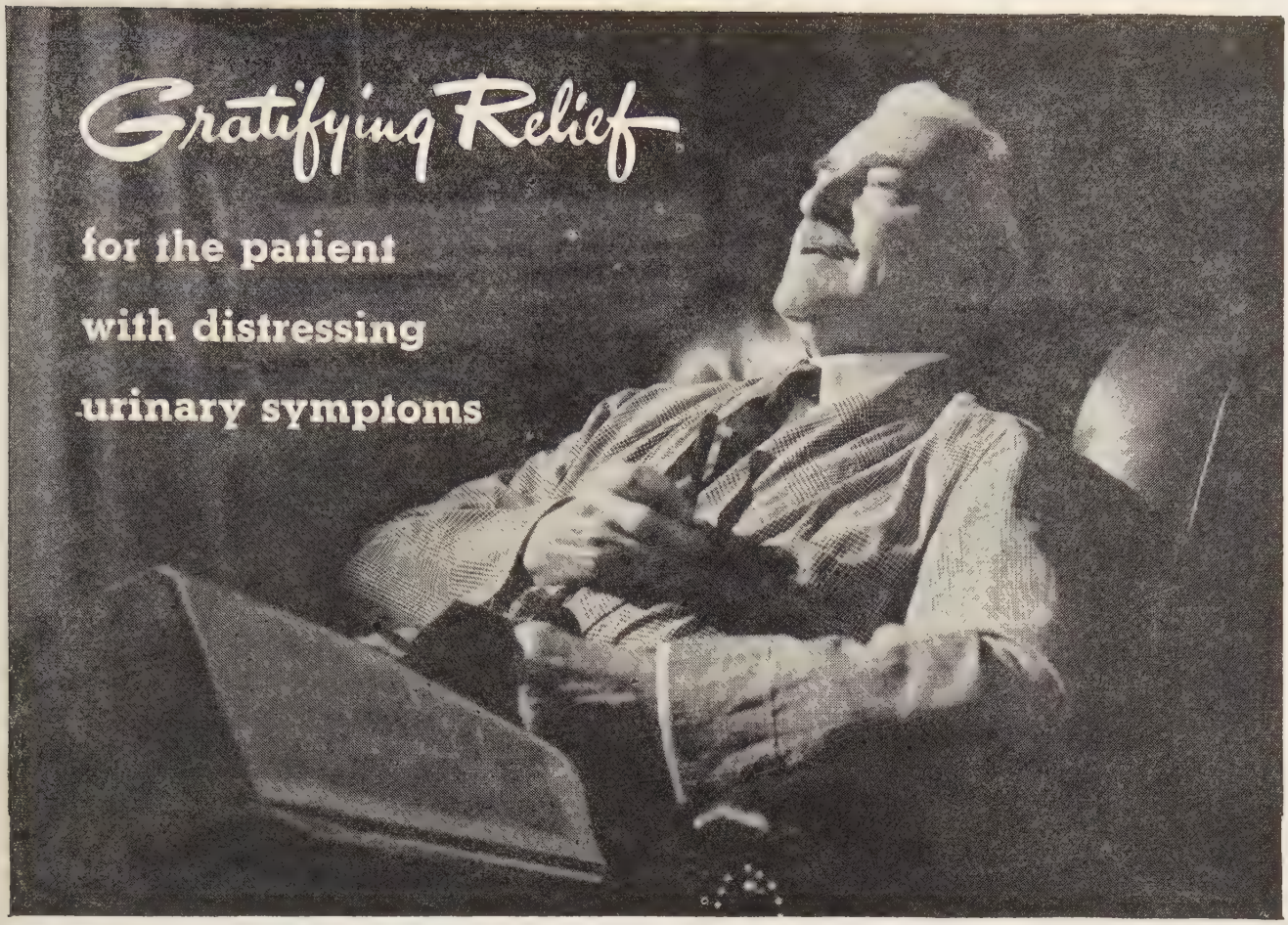
If veterans establish to the satisfaction of the chief medical officer of a Veterans Administration regional office that reporting to a field station would work unnecessary physical hardship or cause excessive loss of time from employment, fee-basis doctors may be utilized. In any event, the final decision rests with the chief medical officers of the Veterans Administration regional offices.

Then too, when the backlog of physical examinations justifies it, or when out-patient treatment is not being rendered expeditiously, the chief medical officers of the Veterans Administration regional offices may utilize the services of civilian physicians working under state-wide contracts with the Veterans Administration.

Male veterans may be admitted to private hospitals (preferably those under contract by the Veterans Administration for in-patient treatment of service-connected disabilities) by civilian physicians under contract to the Veterans Administration, only if their condition is such as to constitute an emergency which cannot be met by a Veterans Administration hospital, because of the lack of beds or because the patient's condition prohibits travel.

Prior authorization for this hospitalization and treatment in a private hospital, must be obtained by letter, telephone or telegraph. If, owing to the extreme emergency of the case, prior authorization is not obtained, the physician or admitting hospital should notify the Veterans Administration within seventy-two hours. If the facts so warrant, the Veterans Administration will then issue authority for the veteran's private hospitalization.

Women war veterans may be admitted to private hospitals by civilian physicians, if it is an emergency which cannot be met by the Veterans Administration or because of the unavailability of beds or because the serious condition of the patient precludes travel. Authorization must be obtained exactly as in the case of male veterans.



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Water-Purifying Tablet

A new tablet for purifying water in the soldier's canteen, which is considered superior to the chlorine-type tablets used during the war, has been announced by the war department. With iodine employed instead of chlorine, the new tablets make the drinking water less objectionable in taste and odor. Tests have shown that the iodine-containing tablet has greater sterilizing flexibility, in that it can be used under a wide range of conditions. It is also more suitable and dissolves more quickly than its predecessor. This tablet was developed by scientists of the Army Medical Department, Quartermaster Corps and Corps of Engineers.

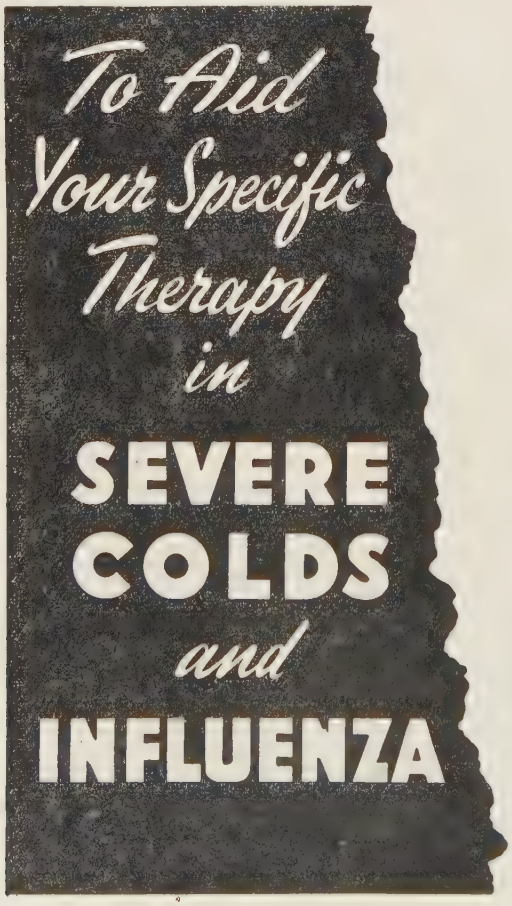
When the chlorine-containing tablets were dissolved in water, soldiers complained that they made the water unpleasant to the taste. It was found that even with strict supervision it was sometimes difficult to prohibit the soldiers from drinking water from streams or wells of questioned purity. After examining a large number of different compounds, scientists found that triglycine hydroperiodide possessed the highest military characteristics. Quickly dissolving tablets containing this chemical which liberated seven and one-half parts per million of elemental iodine were subjected to extensive testing, and it was found to be a safe and highly effective agent.

Additional tests of the new "tablet, water purification, individual, iodine," as the compound has been designated, will be carried out during the ensuing year.

Place of Cancer in Medical School Curriculum

A special committee composed of representatives of fourteen medical schools and of the National Research Council recently met with the National Advisory Cancer Council to discuss the place of cancer in the medical school curriculum. A United States Public Health Service announcement said that the meeting, which was held at the National Cancer Institute, Bethesda, Md., marked an advance in the efforts to eliminate the lag between what is known about cancer and the application of this knowledge to medical practice.

Dr. Frank E. Adair, president of the American Cancer Society, and chairman of the committee, declared that it is obvious that something must be done to improve the education of medical students with regard to cancer, which ranks second as a cause of death in the United States. The teaching of medicine has become more and more difficult, due to the vastness and intricacy of the field, and many educators recognize the need for changes in the curriculum. Among the suggestions made for improving the medical curriculum, were the establishment of professorships in clinical cancer, greater use of the facilities of cancer diagnostic and treatment clinics and cancer prevention clinics, the establishment of cancer institutes or hospitals in connection with medical schools in large urban centers and greater emphasis in the medical school on the importance of preventive medicine.



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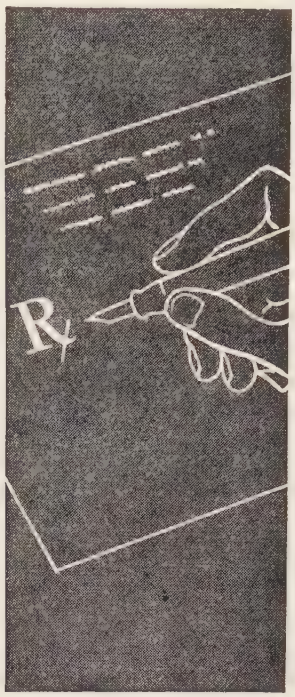

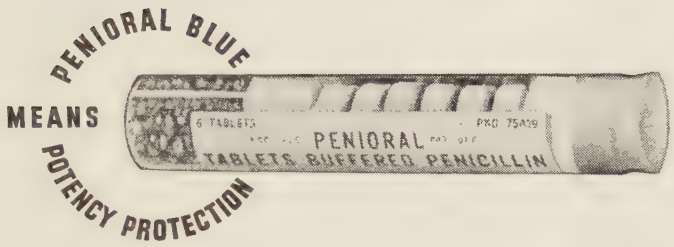

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Critique

Cellini: When Cellini was seriously ill at one time, he was tormented by thirst, but abstained from drinking on a doctor's orders. However, a serving maid who wanted to kill him, gave him all the water he wanted one day, when his regular nurse was absent. He immediately improved rapidly and got well, but he thrashed the maid when he discovered her treachery. See episode lxxxv of his celebrated autobiography for a detailed blow-by-blow account of this misadventure. In episode lxxii he tells how he got a fine splinter of steel imbedded in his eye and called a surgeon; pigeons were stuck with knives and their blood was allowed to gush over Cellini's eye, which immediately gave him relief, and the splinter came out voluntarily in two days. Docs were docs in those days.

When is a normal normal? O. L. Tinklepaugh of the Yale University Institute of Psychology asked and answered this question in *Science* for April 19, 1929. One point he made was that, if a child had experiences which caused it to develop inhibitions and behave quite differently from other children of its class, we might say it behaved abnormally, but what if practically all average children would behave the same way if subjected to the same experiences? Wouldn't you say that the child and its behavior were normal while only its experiences were abnormal? In fact, if it remained unaffected by abnormal conditions and persisted in behaving normally notwithstanding, then it would be abnormal wouldn't it? Well, this doesn't seem to be getting us very far, but Tinklepaugh had a point. You remember the old man who asked

Group nursing: The *Transactions of the American Hospital Association* for 1927 (vol. xxix) contains material on this subject by James McNee and others, describing a plan then in effect at St. Lukes, Duluth. A physician and a patient also assay the method, which proved satisfactory to all. By this method one patient saved one hundred and forty-four dollars in nursing fees, yet had all the attention he required. A "unit" consisted of six beds with two day and one night nurses employed by the hospital and directed by the supervisor; duty was seven till seven, four weeks on day shift and two on night; nurses received four dollars a day plus meals and laundry — remember this was 1927. This made three hundred and sixty dollars a month per unit, plus one hundred and thirty-five dollars for meals and laundry, costing the hospital four hundred and ninety-five dollars, which with ten percent taken off for risks and collections, left the hospital with a monthly profit of forty-five dollars on the unit, for services for which patients paid six hundred dollars.

Livers: You remember the old man who asked his doctor what to do for a bad liver and the doctor said: See your pastor? Well, the liver has a remarkable power for regeneration. From sixty-five to seventy percent of it can be removed, whereupon the remainder will increase in size until six or eight weeks later the lost parts have been replaced. Certain diseases destroy liver tissues but the organ's power of regeneration gives the patient with an injured liver an excellent opportunity to live and even to work along quite happily after much of the offending organ has been removed.

100 kinds of colds: The since defunct *Literary Digest,* April 27, 1929, imparted the dolorous information that there were 100 kinds of colds. Physicians had observed that colds of different types ran riot in their communities at different times. Some were severe, some mild; some were only head colds, some invaded the ears, eyes and chest, and no two successive colds of the same individual were ever wholly alike. The most probable explanation of all this was said to be that successive waves of infection in a community were really due to different germs out of a list of one hundred suspected by research workers at the Pickett-Thomson Research Laboratory in London.

World famine: It is nothing unusual for people to go undernourished. It is the world's custom at peace to permit two-thirds of its population to go underfed, many of them to the point of actual starvation, while two-thirds of its workers are engaged in the production of food. It has usually been the colored races off somewhere who starved; now it is white Europeans, people like ourselves, and we feel we can't stand that. As long ago as October 1, 1945, the Office of Foreign Agricultural Relations of the Department of Agriculture issued a grave warning about a world food crisis and a grim situation was likewise depicted the following month by the State Department. Today we know that thousands of Europeans are on a Belsen diet, that food conditions are far worse in Europe now than ever under the Nazis, that children especially are undernourished, and we have some evidence to indicate that shamefully underfed children produce adults who precipitate world crises when they come to maturity. Remember that the generation of Germans who made so much trouble for the world under Hitler was systematically and deliberately starved after World War I by the victorious Allies. It is imperative that this does not happen again. Greatest shortages are in the supplies of cereal grains used for human foods and edible fats and oils. Whatever way you slice it, or divide the supply, the simple fact is that there is insufficiency of those basic foods to meet legitimate demands. It is a matter of allocation to prevent starvation rather than of moving sufficient supplies to the places where they are needed most. Five hundred million people face the danger of starvation, and a lot of them are not

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of the colored races which we have usually felt we could ignore. The Combined Food Board, (since abolished and replaced by a lay and more representative international organization,) representing Canada, the United Kingdom, and the United States is almost beside itself facing the impossible problem of making too little go a long way in allocating supplies. India, hit by drought and cyclone, needs four million tons of grains this year. Japan needs much more than the 1.3 million tons requested earlier in 1946. Europe is devastated, populations dislocated, livestock and draught animals killed off, fertilizers and equipment short. The UNRRA countries — Albania, China, Czechoslovakia, Greece, Italy, Yugoslavia, Hungary, Poland, Ukrainia, White Russia and the Dodecanese Islands struggle on upon wholly inadequate food supplies, while millions face death by starvation in some countries like China. Rice culture has been devastated and dislocated and the Orientals suffer for it. Against these demands we have less wheat in the world than at any time since 1929—nine million tons *less* than the requests so far registered! All other grains but oats are in short supply and the oat crop is too small to make up many cereal deficits. The world also has in it 2.5 billion pounds less fats and oils than prewar averages. This will not begin to go around until Far Eastern production is restored and volume shipments are resumed. The 1945-46 sugar production was 2.7 million pounds less than in 1943-44 and stands 6.2 million pounds below prewar averages. Less meat was produced in the world in 1945 than in 1944, and world production will show little if any improvement in 1946. Finally, remember, that the world population is up since 1939 at least 100 millions (many of them in Europe), and you can see the per capitâ food situation for yourself at a glance.

Medical specialties A writer in the June, 1929 issue of the *American Druggist*, manifested alarm because USP prescriptions were becoming extinct. Ten years earlier (1919), there had been eighty USP prescriptions given to druggists to fill, as compared to only twenty for medical specialties; in 1929, the ratio was said to be fifty-eight to forty-two. The old fluid extract and tincture bottles were vanishing, and neatly packaged rows of medical specialties had replaced them. In a single ethical drug store in New York City there were ephedrine preparations from six manufacturers — capsules, solutions, elixirs, sprays, jellys, syrups, inhalants and hypo tablets—thirty-two distinct varieties all told, and seventy-five to eighty-five items. Digitalis appeared as oral and hypo tablets, liquid and capsules in seventeen brands and thirty-six varieties. The same thing was true of other drugs. Ten years ago (1919), digitalis would have been present only in a fluid extract, tincture, leaves and possibly one specialty. What has happened since? How are the specialties doing now?

Personality In a study made on the subject of personality, some thirty-nine undergraduates and eighteen graduates of the University of Chicago, as well as 303 children of the Pehavior Clinic of the Institute for Juvenile Research, in Chicago, showed correlation coefficients between 0.20 and 0.30 between: Acid excretions and lack of excitability; larger acid secretions with high blood alkali reserve and submissiveness; excitability and low creatinine.

Well, well H. L. Hollingworth in his *Psychology of Functional Neuroses* says that, "Totemic man drank the blood of the fierce who were slain in battle, in order to appropriate their power. No doubt this redintegrative magic tended to arouse just such added courage as was ordinarily aroused by the actual example of the individual warrior in action. More modern neurotics are similarly stimulated through the emotional reactions and the adrenal adjustments and compensations occasioned by a phial of water from the Jordan, or the touch of a handkerchief mailed by the secretary of some secular healer who has been given newspaper notoriety. The scalp of an enemy, the antlers or pelt of a hunted animal, the statue of a hero, a brass button from a famous battle field, all possess their special virtue through the mechanism of the redintegrative reaction. Perhaps the kiss, the embrace and other varieties of caress, as well as the more servile forms of homage and respectful salutation derive their potency in a similar fashion, through reindetegrated emotions ordinarily accompanying more fully executed attitudes."

Articles that could well be reread David L. Mackaye's suggestive discussion on the "Interrelation of emotion and intelligence" in the November, 1928 issue of the *American Journal of Sociology*, penetratingly remarks on the effects of emotional instability on the measurement of intelligence, and of the fact that brilliant students may be too lazy, unreliable, conceited, selfish, obstreperous, complacent or self-satisfied. Also there was an article on "Psychology and pyschiatry in industry" by Morris A. V. Viteles, which appeared in the April 1929 issue of *Mental Hygiene*, which should be of especial interest to physicians working in the industrial compensation field. The article contains material which indicates that interviewing candidates for jobs, as ordinarily carried out, is about as reliable a guide to the person's aptitudes etc., as shuffling the names in a hat and then selecting one. Viteles also points out that cab drivers become more reliable and earn more salary when over twenty-five; married men earn more than single men; men with children earn more than those without; a successful electric substation operator differs from an unsuccessful one in height, education, age, marital status, etc. In addition there is an excellent bibliography.

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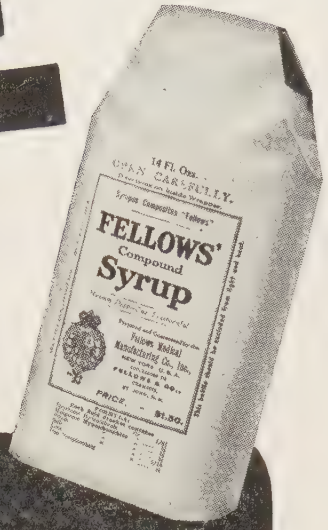

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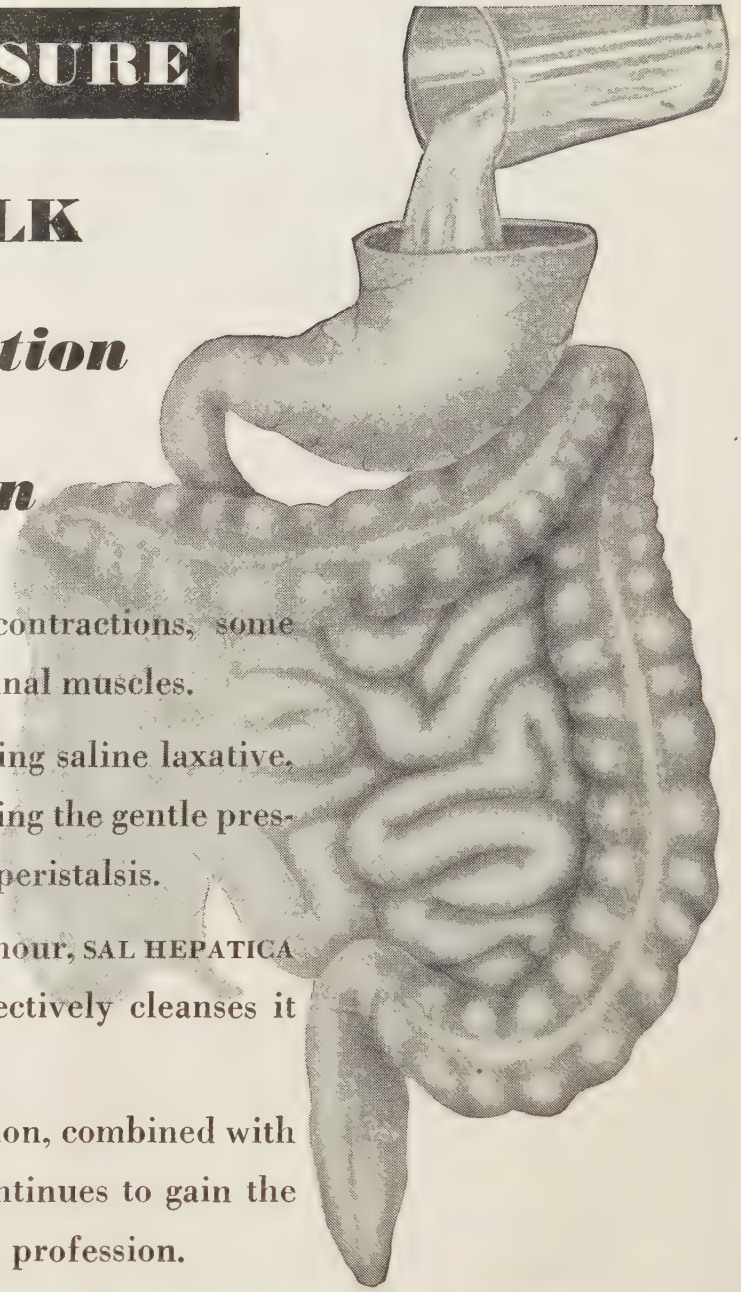

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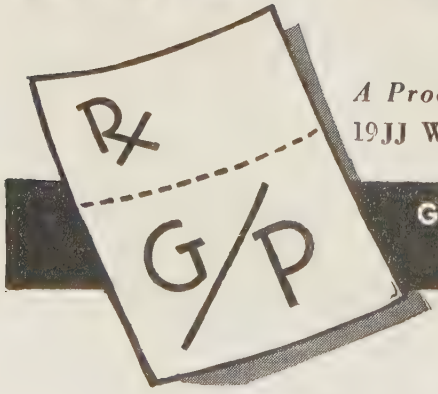

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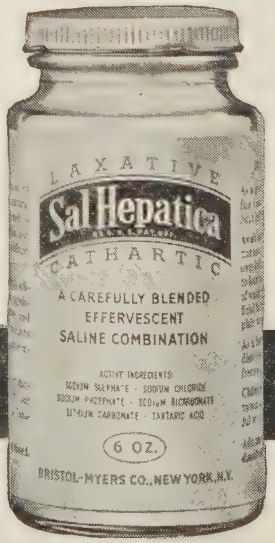

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VITAMIN E IN HEART DISEASE*

Preliminary Report†

ARTHUR VOGELSANG, M.D., EVAN SHUTE, M.D. and WILFRID SHUTE, M.D.

London, Guelph, Ontario, Canada

Introduction

A study of the effect of prolonged Vitamin E deficiency on the coronary and other blood vessels of rats was begun by one of the authors (E.V.S.) in 1934. Sections were taken of the heart, kidneys, aorta and femoral vessel of all the rats sacrificed in our studies on abortion (1,2). Unfortunately it was impossible then to get microscopic sections made; as a result the tissues were never examined and were finally discarded.

Starting on August 4, 1936, large doses of Kelly's cold-pressed wheat germ oil were used in the management of a man suffering from severe and frequent attacks of angina pectoris and tinnitus ("like bees buzzing"). It is of interest that he was the father-in-law of "Case 6" of this present report. There was considerable relief from both the angina and the tinnitus within forty-eight hours, and this persisted for almost a three month period. The pain recurred once when he dragged one hundred and fifty feet of rubber hose about his yard. Accordingly, an attempt was made (by W.S.) to secure confirmatory evidence on a few cardiac patients at the hospital where he worked. This, however, was not possible at that time, and, as the oil was so expensive and both the patient and his doctor too poor to buy it, the experiment lapsed.

While using Vitamin E (3,4) in the treatment of a man suffering from severe thrombocytopenic purpura, the striking improvement in the condition of his damaged heart attracted our attention (A.V.). It was obvious that Vitamin E had had quite as good an influence on his heart as on his purpura, and this fact led us to give it to other cardiac patients. A few of their case histories are given in detail below.

If a food factor like Vitamin E is as beneficial to damaged hearts as our limited experience suggests, one wonders if it might not be at least as valuable in the prophylaxis of cardiovascular disease.

*As read before the St. Thomas and East Elgin Medical Society at St. Thomas, Canada, May 17, 1946.

†First of a series of five papers.

Case Histories

CASE I.—*Primary thrombocytopenic purpura, hypertension, A-V block.* Mr. G. B., aged sixty-seven, (this case is reported elsewhere, (4), but here we shall give more details as to his cardiac condition), when first seen on August 30, 1945, had thrombocytopenic purpura. He was, therefore, prepared for a splenectomy by means of multiple small blood transfusions and an iron tonic. His heart, however, was in such poor condition that the surgeon hesitated to undertake the operation. Unfortunately, no electrocardiogram was taken at this time, as no portable machine was available, but he had a hypertensive heart disease with a marked left ventricular enlargement, some pulmonary edema, ankle edema and occasional distress on exertion. His eye grounds were pale and showed minute old hemorrhages, but no recent ones. His circulation time (calcium gluconate, arm-to-tongue) was 42 seconds. On bed rest his compensation improved slightly.

After the administration of ephynal in doses of 100 mgm. daily, (which was used for his purpura), was started on September 22nd, he showed no prompt improvement in his cardiac condition. On September 30th, the ferric iron was discontinued because it was suspected that the iron might be vitiating his E-therapy, (5,6) and he improved promptly! After October 2nd, he became ambulant, active and free from all edema, in fact, at that time, he was seen helping the nurses carry dinner trays. Due to the fact that he was about to be discharged he was given purodigin 0.8 mgm. on October 8th, then 0.2 mgm. each day thereafter, as well as the same dose, 100 mgm. daily, of Vitamin E. On October 12th, his circulation time was 25 seconds and there was no edema. He was sent home on October 16th. He was able to walk a mile a day during the next three months, and although kept under close observation, showed no pulmonary or peripheral edema and much less precordial distress. During this time, whether he maintained his digitalis dosage or forgot it for days at a time, seemed to be clinically unimportant. Indeed, at the end of this period he rarely took digitalis.

He was readmitted to the hospital on February 5, 1946, and went through another transurethral prostatectomy without difficulty on February 8th. He was raised to 200-300 mgm. ephynal per day and was given a precautionary dose of 0.1 mgm. purodigin after February 11th. His surgeon ordered ferric iron as well. His cardiac status was fine thereafter until February 16th, when, probably because of constant hematuria, he developed pulmonary and peripheral edema. His pulse rate fell to 40, his blood pressure fell overnight to 110/80, and he became dyspneic. An electrocardiogram taken the next day showed complete A-V dissociation. The purodigin was therefore stopped at once.

The ferric iron the patient had taken from February 11th, until the 20th, makes it doubtful if any of the Vitamin E he was taking was effective during that time, just prior to and after the block appeared. The ephynal intake was cut to 100 mgm. per day between March 1st and the 14th, as it was feared, this early in our studies, that it might be a factor in originating his block. The block, however, was not helped by this decreased dosage of ephynal. After March 14th, the ephynal intake was raised to 300 mgm. again. Clinically, his block disappeared on March 17th and the small residual hematuria stopped suddenly on March 22nd. The dose of ephynal was raised at that time to 600 mgm. per day, and no heart block has ever recurred. On the 26th of March, the red count was 2,700,000 and the hemoglobin 42 percent (Dare). Accordingly, he was given two small transfusions on the 26th and 27th, after which his cardiac condition improved steadily and he became ambulant. An electrocardiogram taken on March 27th, showed no block, but there was a slight prolongation of A-V conduction (0.24 seconds, P_1 and P_2 slightly notched, some left axis deviation, P_2 slightly down and T_3 and T_4 inverted. On April 4th the platelet count was 96,000. He was discharged from the hospital the next day in good condition, and ever since has remained well.

CASE II.—*Hypertension, Angina pectoris, Auricular fibrillation.* Mrs. S., aged seventy-one, had had attacks of paroxysmal tachycardia since the age of seventeen. These attacks had steadily become more disabling through the years, and early in 1945 they shifted into frequent attacks of auricular fibrillation, which at times continued from four to six hours in length. Edema of the hands appeared and a hypertension of 170/90 developed. Anginal pain appeared in April of that year, and at times was aroused by minimal effort or nervous stress. By December, acute anginal pain was being experienced many times a day, and this general condition persisted throughout the early winter of 1946, despite one grain of digitalis per day and injections of 2 cc. cortunon given every three days. The latter improved the cardiac efficiency for about two months, but by January 1946 it seemed to have lost its ability to help, both were then discontinued. At that time, she was often afraid to walk across a room for fear of angina. On February 16, 1946, an examination revealed her blood pressure was 198/90, the pulse 76 and regular, a regular sinus rhythm, and her heart enlarged one inch beyond the midclavicular line. Fluoroscopy revealed an even more marked left ventricular hypertrophy of a typically hypertensive contour. There was a moderate apical mitral systolic blow. The chest showed moist, crepitant râles over the right base posteriorly and also in the axillary line. A diagnosis of hypertensive cardiovascular disease with left ventricular enlargement and relative mitral regurgitation with failure was made. The electrocardiogram showed no marked abnormalities except a P-R interval of 0.24 seconds, indicating prolonged auriculoventricular conduction time.

At that time, she was started on 200 mgm. ephynal per day. Five days later, she noticed the onset of marked diuresis and the edema of her hands suddenly disappeared. She still had some râles in the right base of her chest posteriorly, but she experienced no anginal pain for the next seven weeks and was more active than ever before. She then started her digitalis again as she "thought she should".

On March 9th, she had a slight congestion at the right base posteriorly, no angle edema, her blood pressure was 190/100 and pulse 64, (she had hurriedly walked a mile just before this), and her electrocardiogram showed no change. On March 23rd, the ephynal dosage was cut to 100 mgm. and the digitalis stopped. Her lungs were now clear and remained so. Attacks of palpitation began again on March 27th, and her 200 mgm. dose of ephynal was reinstated. The palpitation became worse almost immediately, and many dropped beats developed. She insisted on stopping the doses of ephynal on March 29th, and reverted to her digitalis instead. Her relief was immediate. By April 2nd, she seemed quite normal and announced she "had not felt as well for a year!" Her chest was clear and the blood pressure was 160/86. On April 11th, a severe anginal attack occurred, the first one to be noticed in an active seven weeks. Therefore, she was given 125 mgm. of ephynal per day after the 14th, and her digitalis was stopped. On April 17th, she worked strenuously in her flower garden for a half a day with no ill effects or pain. Had she attempted this years before, it would have bothered her for at least two days and caused prolonged attacks of fibrillation and much anginal pain. After April 25th, she carried on actively on 175 mgm. of ephynal per day. She has been well ever since that time and has required no digitalis at all.

CASE III.—*Angina pectoris.*—Mrs. M., aged fifty-five, was seen in 1943, at which time she complained of a lack of energy and attacks of anginal pain brought on by exertion—notably walking six blocks up a hill near her home. Administration of amyl nitrite promptly relieved the distress. At that time she was given two, and later one tablet of theominal per day and on this regimen she was fairly comfortable. She stopped the theominal in January 1946 on her own initiative.

Her angina soon returned and became severe and frequent. An electrocardiogram taken on April 1st

showed nothing of note. On April 2, 1946, she was given 200 mgm. of ephynal (and nothing else) per day. She had no anginal pain after April 5th and reported ten days later that she was "feeling better than she had felt for five years". She has been well since and says she "works like a horse and feels like a colt".

CASE IV.—*Rheumatic fever, Chorea, Valvular lesions.* Mr. A., aged nineteen, was first seen February 16, 1946. Five years before he had an attack of acute rheumatic fever. For the last month he had been confined to his house for "nerves". His complaints were dyspnea on exertion, with slow improvement on rest. He had had choreic movements of the left arm and face for the past two weeks and had mild transient "blackouts". His blood pressure was 120/90, pulse rate 104 and regular, and his weight was 117 pounds. An electrocardiogram revealed no axis deviation, and S-T segments in the three limb leads were depressed. T_1, T_2, T_3 and T_4 were negative. There was some slurring and splintering in R_4. The cardiac impulse was forceful with a loud, low-pitched systolic blow over the entire precordium, which became coarser over the aortic area. There was a thrill felt over the base, which was transmitted up the neck. On fluoroscopy the heart showed no marked increase in size or any change in contour.

A diagnosis of acute rheumatic fever with chorea and rheumatic heart disease, without cardiac enlargement but with mitral regurgitation, and aortic stenosis was made.

He was at once given 150 mgm. tocopherex per day. On March 2nd a small dose (15 grs.) of salicylate and one and-one-half grains of luminal per day were added. On April 20th the dyspnea had disappeared, he had had no blackouts for two months, his blood pressure was 130/80, pulse 116 and his weight 115 pounds. The murmur was not so loud and the low-pitched mitral blow was much softer. The thrill, and the coarse aortic systolic murmur were unchanged. There was marked improvement in the electrocardiographic findings. $S\text{-}T_1$ and $S\text{-}T_3$ were no longer depressed, and all T waves were positive; S_4 showed a very small, late slurring. On April 29th, almost no thrill could be found, as the patient himself had observed, and the coarse aortic systolic murmur had lost much of its volume.

CASE V.—*Rheumatic heart disease with failure.* Miss E. G., aged twenty-seven, was first seen on March 23, 1945. She complained of pain over the precordium following exertion, which she had felt for approximately six weeks, plus a shortness of breath noticed for three weeks. She said her "heart pounded" on first awakening in the morning. She had been denied insurance two years previously. At five years of age, she had been told she had "heart trouble" and so was kept in bed for over a year on that account. In 1944, a physician gave her digoxin for a time.

On examination her blood pressure was 130/80, pulse 84, and there were moist râles at both lung bases posteriorly. The heart was enlarged four inches to the left of the midclavicular line and showed a regular sinus rhythm and a slight presystolic roughness, followed by a loud mitral systolic murmur heard over the entire precordium. Accordingly, a diagnosis of rheumatic heart disease with enlargement, mitral regurgitation and early pulmonary edema was made. She was given theolamine and phenobarbital compound at that time.

An electrocardiogram taken on March 30th, showed right axis deviation, low voltage of the QRS complexes, an inverted T_3 and a depressed $S\text{-}T_4$. Fluoroscopy revealed gross cardiac enlargement, both to the right and left, the Danzer cardiac-chest ratio being about seven. She was sent home and told to rest.

She was again seen on April 7th, April 21st and May 5th. On this last visit, following some slight work at home, she had developed some pulmonary edema and was therefore digitalized. By the 2nd of June the shortness of breath had improved but she still noted occasional precordial pain. Her heart seemed to be reduced slightly in size on fluoroscopy. Her condition remained unchanged during that summer except that the precordial distress became somewhat worse. By November of that year, she could do small tasks at home and wanted to go back to work. Her heart, however, was still enlarged more than two inches to the left and a saccharin circulation time was 28 seconds. When seen in February 1946, she still had some precordial distress and was quite short of breath, especially in the cold weather. By March 30th, the precordial distress was felt only occasionally, but she was still short of breath, particularly in the evenings. Her ankles swelled in the afternoon and sometimes she would awaken in the morning slightly out of breath. In spite of these symptoms, she insisted on going back to her work, which was bookkeeping.

At this time, March 30th, her previous medication was stopped; instead, she was given 400 mgm. tocopherex per day. On May 4th, she remarked that she "felt much better than she had in years". She no longer had any shortness of breath nor paroxysmal nocturnal dyspnea. For the first two weeks after going back to her job, she had noted occasional attacks of precordial pain but had not had any since. During April she had been doing heavier work than any she had ever done before, involving repeated trips up and down stairs. Her only complaint was occasional "dizzy spells". Examination now revealed a hemoglobin of 60 percent (Sahli), and a red count of 3,300,000. Because iron seems to counteract the effect of Vitamin E and was therefore contraindicated, she was given fifteen units of liver extract intramuscularly twice a week. After the first two injections, the "dizzy spells" disappeared. She had been kept on the same dose of Vitamin E throughout this period. Fluoroscopy showed her cardiac contour to be much smaller than ever before, both the left and right sides being one inch inside the last-mentioned outline.

CASE VI.—*Coronary thrombosis and Cardiac fail-*

ure. Mr. R.E.B., aged forty-nine, a heavy cigarette smoker, had had anginal pains for nine years. His heart disease had become increasingly severe during the past three years, following a "coronary attack" in August 1943, which had kept him in bed for three weeks. He had never been in acute failure until January 1946. His electrocardiographs taken in September 1943, showed no marked abnormalities, except an isoelectric T_1, and a negative T_4. On a cardiac routine, he had recovered and returned to half-time work at his trade (barber) for five days each week. He suffered increasingly frequent and severe attacks of anginal pain in these three years, for which he found nitroglycerine helpful, and by the end of 1945, he was taking on the average of twenty tablets per day. These tablets were gr. 1/100 (Frosst). His distress was worse at night.

After Christmas 1945, he became increasingly dyspneic at night and around February 16, 1946, he went into acute failure and began experiencing very severe attacks of coronary pain, for which he took thirty to fifty nitroglycerine tablets per day. He had "squeezing" sensations in his chest, and had so much cutaneous hyperalgesia over the thorax, especially posteriorly, that the weight of his clothes was painful to him. His anginal pain was almost continuous after February 15th, and he had severe attacks of paroxysmal nocturnal dyspnea. After February 27th, he developed a distressing and productive cough.

On March 2nd, his blood pressure was 100/70 with a regular pulse of 76. At that time, he had moist râles in both bases, was unable to lie down on account of the productive cough, became too dyspneic to talk and had developed maximum edema of the ankles and legs. His urinary output was small and his liver was down three finger-breadths. The heart sounds were soft and distant. There were no obvious murmurs nor any enlargement to percussion. He was literally eating nitroglycerine without relief, and was obviously *in extremis.* His electrocardiograph showed a depressed S-T segment in leads 1 and 2, depression of T_2, deep Q_3 (which satisfied Pardee's criteria), sharply inverted T_3, P_4 inverted, and high, sharp T_4. His case was diagnosed as an old coronary heart disease, with pulmonary, visceral and peripheral edema. On March 3rd, he was put on 300 mgm. ephynal per day and given no other treatment. By the 7th, he had begun to sweat profusely but was still quite oliguric. He looked better, but was tortured by a night cough and still had to sleep sitting in a chair. On the 8th, his left lung base was clear and he remarked that he had lost the tenderness over the posterior aspect of the thorax that had bothered him for the past six months. On the fifth day of treatment, diuresis began suddenly and continued. By the tenth day, his face and hands were free of edema, he had almost stopped taking nitroglycerine in the preceding thirty-six hours and his cough was rapidly clearing up. His electrocardiogram on March 10th, showed S-T_1, less depressed, T_1 inverted, S-T_2 and T_2 less depressed, Q_3 not so prominent and only one-third of the depth of the week before. By the 14th, he had no edema anywhere and was sleeping on one pillow. He had had no cardiac pain for five days and was able to walk upstairs twice a day with no dyspnea or pain. On the 19th, (the sixteenth day after ephynal was begun) he went fishing and looked quite well. On the 24th, he returned to his orchestral playing of the drums and tympani and was reduced to 100 mgm. ephynal per day, for fear of an overdose. He commented that "he had much less distress while playing than at any time in 1945". On March 25th, his electrocardiograph showed S-T_1, almost isoelectric, T_1 slightly inverted, still further improvement in S-T_2 and T_2, Q_3 much as on March 2nd, but his T_3 only very slightly depressed. He was now able to lie supine while being tested. His blood pressure was still 100/70. On April 1st, he returned to his barber shop, "feeling better than he had felt in two years". He was then cut down to 50 mgm. ephynal per day, and took only three or four nitroglycerine tablets each day, for the merest suggestion of cardiac distress. He probably didn't need them, as he admitted, but he "remembered how they used to help him". On April 4th, he began to notice "fluttering" sensations which became quite frequent on the 5th. His ephynal was promptly stopped and five days later these sensations disappeared. On the 13th, he had a recurrence of moderate effort angina but this cleared up on 50 mgm. ephynal, although again the dropped beats made him discontinue its use. Indeed by the 16th, he said that his heart was "like a boat on a stormy sea". His dose was cut on the 18th, to 25 mgm. per day and he has been well and active ever since.

CASE VII.—*Hypertension, Angina pectoris, Coronary thrombosis.* Mr. C., aged forty-five, was first seen January 4, 1946. For the preceding three years, a cardiologist had been treating him for angina pectoris with doses of nitroglycerine. When the patient first came to us his blood pressure was 190/120, he weighed 215 pounds, and he had pulmonary edema with dyspnea at bed rest. He was given theophylline ethylenediamine and phenobarbital and put on a 1,000 calorie diet. He responded well, losing 25 pounds, and then returned to his former occupation, that of a druggist.

A week later, January 19th, he had a typical attack of coronary thrombosis with persistent mild retrosternal oppression. His blood pressure was then 115/70 and dropped to 80/65 in the next twenty-four hours. An electrocardiogram taken twenty-four hours after this attack began, showed left axis deviation, depressed S-T_1, a negative T_1, a prominent Q_3, depressed S-T_2 with a smooth concavity directed upward, a positive T_2, prominent Q_3, S-T_3 curved, the same as in the second lead but not depressed, and a positive T_3. There was a high-take-off S-T_4 with a positive T_1. He was given 300 mgm. tocopherex per day after January 20th.

He made good progress, losing his anginal pain in twenty-four hours. He was kept in bed for a month, during which time he had what seemed to be

vascular cramps in the left leg, perhaps related to his unaccustomed low blood pressure. At the end of the month, his blood pressure was 125/85, and at that time he was allowed to get up from bed. On March 20th, another electrocardiogram showed no axis deviation, $S\text{-}T_1$ practically isoelectric, prominent Q_2, slurring of the descending limb of the initial ventricular complex in the second lead, $S\text{-}T_2$ depressed and T_2 inverted, a broad slurred Q_3 and a similar slurring to that seen in QRS_2, $S\text{-}T_3$ isoelectric and T_3 inverted. In this electrocardiogram, there were occasional premature ventricular systoles. The dose of tocopherex was increased to 400 mgm. per day, but even before this time, the patient had begun to look for a job again.

By April 12th, his weight was 178, his blood pressure was 140/80 and his pulse was 120 after pushing his car when it balked. An electrocardiogram at that time showed much less slurring of his initial ventricular complexes, but following each two regular beats there was a premature ventricular systole.

This patient has returned to work with renewed energy and activity.

CASE VIII.—*Coronary thrombosis, Renal colic.* Mr. H. E., aged forty-nine, worked for a power company as a truck driver and lineman. A routine chest plate taken June 20, 1945 at the Freeport Sanatarium, Kitchener, Canada, suggested some enlargement of the heart over the corresponding x ray size of fourteen months before. For twenty-six years, since an attack of scarlet fever, he had had recurrent, almost weekly, attacks of severe right kidney and ureteral colic, often requiring chloroform or morphine, and after each attack he passed 1 to 2 cc. of true gravel. No stones appear in the x ray at present, and intravenous pyelograms are normal. For the past year and a half precordial pain had frequently followed these attacks of colic, in which the pain radiated down the left arm and was only relieved by amyl nitrite. Occasionally there was some irregularity of the pulse during the pain; after July 1945, he suffered occasional anginal attacks apart from his bouts of renal pain. On November 17, 1945 he was struck by a telephone pole which fractured his ninth thoracic vertebra and while in a body cast he suddenly developed a typical coronary thrombosis on January 1, 1946. Morphine was administered in large doses. An electrocardiogram taken January 2nd, showed depressed $S\text{-}T_2$ and $S\text{-}T_3$ and inverted T_2 and T_3. On January 21st, 2_2 had become isoelectric. On January 25th, and February 2nd, he had milder coronary attacks and on the latter occasion his relatives were summoned to his "death-bed". On March 7th, the cast was removed and when he was allowed up thereafter, he showed ankle edema and dyspnea. It may be added that he has never been given digitalis.

On March 14, 1946 he was given ephynal, 200 mgm. daily, and has had it continually since. The first effect he observed was an increase of energy, and all his edema completely disappeared by March 24th. He has improved steadily and on April 13th, he worked in his garden before walking to the office. His urinary output increased noticeably on the 20th, and he no longer got up once or twice each night to void. He has had no renal or cardiac symptoms since and has returned to his work of driving a truck. Although forbidden as yet to work on hydro poles, he admitted climbing a forty-four foot ladder with ease on May 4th. This presumably is a modification of the "step test"! On April 24th, an electrocardiograph showed P_4 inverted, T_2 positive and $S\text{-}T_3$ isoelectric. An x ray of the chest of May 3rd, showed the heart shadow of normal size and position, and he had lost the apprehension and fear which had dogged him for years.

CASE IX.—*Hypertension, Coronary disease, Auricular fibrillation.* Mr. V. R., aged fifty, was in bed for four months in 1943 with a four plus albuminuria, a blood pressure of 200/100 and great dyspnea and orthopnea. He suffered from a coronary thrombosis attack associated with hypertension in February, 1944; indeed, he knew he had hypertension and albuminuria for a period of thirty-five years. For some time, he had a chronic sinusitis and bronchitis, and the result of this together with his cardiac condition, had been dyspnea on the slightest exertion. Because of the coronary attack mentioned above, he was kept in bed until May, 1944. A heart x ray late in 1945 was normal. His pulse was always rapid, and as much as 17 grs. digitalis (Powell) per day didn't lower its rate in a prolonged trial.

On March 13, 1946 he had an acute upper respiratory tract infection with a fever of 100° F., but on sulphamerazine therapy this fever disappeared in two days. During the attack, however, he had an acute pain in the left side of his chest, left side of the neck, left shoulder and down the left arm, a fall in blood pressure from his usual 220/120 to 150/100, and a decrease of the pulse rate from 110 to 90. He developed an auricular fibrillation on March 16, which two grains of digitalis per day did not control. After March 21, 1946, he was given 200 mgm. of ephynal per day together with digitalis. The latter, however, was stopped on March 28th, in order to avoid unduly confusing the clinical result. An electrocardiogram couldn't be taken until April 2nd, as his condition was so poor; the electrocardiogram revealed the fibrillation, of course, plus some digitalis changes.

On April 12th, his electrocardiogram revealed a decreased rate, a return to a regular rhythm, with notched P_1 and multiform P_2. On April 19th, as his heart rate was up to 90, he was returned to digitalis as well as continued on the ephynal therapy. On April 26th, he returned to work and apart from some weakness, he claimed that he "felt better than in two years". Indeed, during that time, he had been too dyspneic to say a sentence without pausing for breath continuously. He is now a normal conversationalist and is a travelling executive for a governmental agency.

On May 3rd, his pulse rate was 100, his blood

pressure 165/100 and he again developed some dyspnea ascribable to an acute sinusitis, although less than he had had for two years. His heart findings were normal and he had lost thirty-two pounds since March 16th.

CASE X.—*Cerebral thrombosis, Coronary disease.* Mr. I. S., aged forty-nine years, was a professional drummer. He had a cerebral thrombosis in May 1940, involving the left side of his face, tongue and the extremities. He wasn't able to speak for a week and spent sixteen weeks in bed. He was able to return to work as a transformer winder in November of that year. It is of interest, too, that his mother, father and two brothers also had severe cardiac disease.

In September, 1943, he had a characteristic coronary thrombosis, and spent an additional twelve weeks in bed. In July 1945, he had another coronary attack, which was checked by an electrocardiogram; he was then put to bed for another five weeks. Ever since that time he had been able to work only five hours per day as foreman of the transformer winders and he had been in bed for three or four days at a time for such trivial excesses as shovelling coal into his furnace, or lifting up a difficult garage door. His pulse had always been 88 to 92; he has never been given digitalis.

On April 22, 1946, he was given 200 mgm. of ephynal per day, whereupon he noticed an improvement after four days. He first lost the pain in his left arm; next, as he had previously been unable to listen to radio hockey for fear of excitement angina, he now became able to do so. He has had no angina since he began taking the ephynal, and his urinary output was doubled after May 1st. His finger ring had fitted tightly for five years—since his apoplexy, but on May 5th, it fell off his finger as he dried his hands! He had lost five pounds in weight and on May 4th his pulse was 76. On May 9th, his blood pressure was 140/84, he had no heart findings and an electrocardiogram taken, merely showed a left axis deviation, notching and slurring of QRS_3.

Summary

1. It was accidentally observed that Vitamin E in large doses improved the condition of a patient who had a hypertensive heart disease. The average dose was about 200 mgm. of alphatocopherol per day.

2. Other cardiac cases were then studied to find out if this effect was consistent in both coronary heart disease and rheumatic heart disease. The results have been promising, but a larger series must, of course, be studied before any proper evaluation of this new therapy can be offered.

3. All patients in this series having anginal pain, have shown either a great reduction in the pain's severity or its entire disappearance.

4. Patients with edema showed a weight loss and the disappearance of clinical edema.

5. All patients showed an increased exercise tolerance.

6. All patients voluntarily reported an early improvement in their sense of well-being.

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LYMPHOGRANULOMA VENEREUM

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Lymphogranuloma venereum, alias lymphopathia venerea, is an infectious disease caused by a filtrable virus; it is contracted mostly through sexual intercourse and occasionally through abnormal sexual practices (1). The small evanescent primary lesion of this disease is painless and usually remains unnoticed. The lymphogranuloma virus being lymphotropic, the disease usually involves the lymph channels and the lymph nodes and becomes manifested in a variety of ways, such as bubo formation, rectal stricture, genital, elephantiasis and ulceration. The disease has a tendency to great chronicity and is infectious during the period of its activity (2). The general practitioner does not see very many cases of this disease, but in the larger venereal clinics and in the offices of the busy proctologists, cases of this stubborn affection are not infrequently encountered. To quote Udaondo *et al.*, (3), "the prognosis of this condition is unfavorable. It is most difficult to check the progress of the disease with drugs and, in its anorectal type, obstruction of the rectum interferes with the intestinal function so that it becomes necessary to establish an iliac anus to preserve life. Owing to the spread of the infection and to the involvement of the adjoining tissues, surgical treatment is most difficult. There is a high mortality rate. Successful surgery is possible only in the early incipient stages of the disease."

A. W. Grace (2) gives a similar prognosis: "lymphogranuloma is not completely controlled by

present forms of therapy." "There is no cure for this condition and it is slowly progressive", is the opinion of a well known proctologist who has seen approximately three hundred cases of lymphogranuloma.

In fact, the pessimism as to the very possibility of an ultimate cure is so great in certain circles, that when a doctor attached to a dermatological department of a well known university, saw the patient, whom a proctologist had pronounced cured five months previously, she refused to believe her own eyes and persisted in giving a gloomy prognosis.

The case which follows is reported because the patient *was* cured and because the treatment was at variance, in many important details, with the one generally recommended.

Case History

On July 16, 1944, Mrs. L.N., a colored divorcee of about thirty-eight years of age, consulted the author in reference to a persistent purulent perianal discharge. She had been constipated for quite some time and had been forced to resort to cathartics in order to keep her bowels free. It was impossible, from the history given by the patient, to fix the date of the onset of the disease; however, she related that when she gave birth to a child in 1932, her physician could not give her a satisfactory rectal examination because of a rectal stricture.

Inspection of the perianal region revealed the presence of multiple fistulae, and digital examination disclosed a marked stenosis of the lumen of the rectum. This stenosis had progressed to the stage of an almost complete obstruction about two inches proximal to the anus.

The patient was referred to a well known proctologist but she disregarded the advice and entered a private general hospital where, after a period of observation which lasted several weeks, a colostomy was performed.

On October 4, 1944, the author was again called in to see her. She was found to be more nervous and run down than before, and had become too weak to work. The colostomy was not performed in the iliac region but at a much higher level and there was a marked tendency for the bowel to prolapse through the artificial opening. She was told that the colostomy would have to be a permanent fixture and that all she could expect later, would be a complete extirpation of the rectum.

A well known proctologist who saw her on October 5, 1944, confirmed the diagnosis of lymphogranuloma and remarked that he would have avoided a colostomy by simply opening the rectum for drainage. This could easily be done in such cases with the finger. He disapproved of the improper site of the colostomy and gave the case up as incurable. On November 22, 1944 the patient came back to the author for further treatment.

A survey of the literature on the treatment of lymphogranuloma had suggested intramuscular injections of the patients own blood or of an autogenous serum (5 and 6), plus the oral use of one of the sulphonamides. Of the latter chemotherapeutic agents, sulfanilimide, sulfathiazole, sulfadiazine and sulfaguanidine were recommended by various authors (7, 8, 9, 10, 11, 12 and 17). After some deliberation sulfamerazine was decided upon, because of its low toxicity and its effectiveness in small doses. Since the patient was more difficult to get along with than the average one, the author thought she would be less likely to rebel and discontinue the treatment prematurely, if she were told to take six tablets in twenty-four hours rather than if she were to take two or three times that number.

Three articles the author had read at that time gave additional reasons for choosing sulfamerazine. In one of the articles Flippin, Reinhold and Gefter, (14), recommended sulfamerazine as the drug that proved to be effective in various virus infections, e.g., atypical pneumonias, choriomeningitis and acute encephalitis. The second article by Benjamin W. Carey, (15), was even more to the point, for it suggested that "sulfamerazine may be found useful in the treatment of lymphogranuloma venereum since it has been shown that it protects mice against the virus." In the third article on this subject, the author, Eunice S. Greenwood, (16), asserts: "sulfamerazine has been found to combine minimum dose, maximum solubility in acid or alkaline solution, maximum reabsorption from the kidney, maximum solution in blood and tissues, and least conjugation. With the introduction of this drug is expected minimum toxicity plus minimum renal damage".

When the patient finally reported for treatment, on November 22, 1944, sulfamerazine was prescribed, 1 gram every eight hours, to be taken with a great deal of water, two concentrated multivitamin capsules a day and a nourishing vitamin-rich diet. Simultaneously, a few cubic centimeters of her own blood was drawn and injected intramuscularly into her gluteal region. On November 24th, the same procedure was repeated and, in order to obviate the necessity for frequent venapunctures, she was sent to a laboratory where a larger quantity of blood was drawn and an autogenous serum prepared. The serum was kept in a refrigerator and a few cc.'s were used for an intramuscular injection every time the patient came to the office for treatment.

Early in December 1944, the author learned that a preparation was being manufactured, known as lygranum, which was being used both for the diagnosis and treatment of lymphogranuloma venereum. The author wrote to the manufacturers and received the following reply:

"Your description of the patient who is suffering from this disease is most interesting, and your therapeutic approach to the problem is in order, although, to our knowledge, no reports have been written on the use of sulfamerazine in lymphogranuloma venereum. Rather, they have mentioned the use and response to sulfathiazole.

"The administration of serum obtained from the patient is practical from the standpoint of specific

antibody formation against the organism of lymphogranuloma venereum, but there is some likelihood that the concentration of the antibodies would be relatively low, inasmuch as the disease has now taken on a state of chronicity.

"It has been our belief for some time (and this is substantiated by clinical reports) that the concentration of the yolk sack antigen of lymphogranuloma venereum is higher than could be obtained by any other procedure. In addition to this, it would seem to be more desirable to attempt to produce an active immunity rather than the passive type, which would be brought about by the administration of serum". The manufacturers were kind enough to supply the lygranum gratis, and it proved to be a most valuable addition to the author's armamentarium.

On January 4, 1945, the patient was given the Frei test, using lygranum for that purpose, and the test was strongly positive. On January 12th administration of lygranum was begun, keeping up for several more months, the intramuscular injections of the autogenous serum, the oral administration of sulfamerazine and the vitamin capsules for the entire duration of the treatment.

Grace advises the intravenous administration of lygranum; the author preferred to give these injections intradermally. Besredka (20), Blatt (21), Corbus (22), Bunney (24), Gelder, Fisher, Jacob and Orris, Reitler, Roberts, Rosenbaum (26), Tuft (25) and many others have used the intradermal method with success, both for prophylactic immunization and therapeutic purposes. The author's results with this method of treatment during the past fifteen years, have been quite satisfactory.

The advantages of this method are: smaller doses of the antigen are being used, violent systemic reactions are avoided, it is just as effective in producing an active immunity as the rival intramuscular and intravenous routes and it is also much safer.

A source of some difficulty was the colostomy, as it prolapsed from time to time and required reduction. A greater source of difficulty were the physicians whom the patient consulted while under the author's care; he was criticized by them, *in absentia,* for almost everything he did. The patient came back and informed the author that Dr. X told her that he did not see what good her own blood and autogenous serum would do when injected intramuscularly. Dr. Y said: he never used sulfamerazine and is under the impression that it is too dangerous a drug to fool with over long periods of time. (The patient was instructed by the author to drink *at least* one additional glass of water for every tablet of sulfamerazine taken, and to return immediately if she should ever notice any rash, elevation of temperature, conjunctional injection, nausea, vomiting, hematuria, anuria or any other unusual sign or symptom). Still another doctor told her that it was wrong to take lygranum interdermally as it would mar her skin, and that she was foolish to waste her time and money on useless treatments. "The damage has been done", wrote one of them "and even if the process could be cured, (and this is questionable) the rectal stricture would still be present."

Such explanations, warnings and dire predictions did not keep the patient from coming back for treatments, though they must have succeeded in undermining, to some extent, the confidence she had in the author, since as time went by, her visits to the office were getting less frequent and at times the management of the case was a veritable ordeal.

Fortunately she was making steady progress: her general health improved, she gained weight, her anemia, as judged by frequent hemoglobin determinations (the Tallquist chromometric method was used) was cured, and the hitherto persistent discharge was entirely stopped.

One of the consultant proctologists wrote to the author on April 6, 1945 as follows: "I have reexamined your patient on March 30, 1945, and found a completely dry anal region up to the strictured site mentioned. If the local condition remains as it is, I should be constrained to declare that woman cured. I have advised her, however, that she continue on, for some months with the treatment that you have been using, because from past experience I have not expected a cure. There always has to be a first time for a recovery."

Late in the fall of 1945, the consultant proctologist (above) decided that the disease was cured, and that it would be advisable to remove the obstructed, diseased portion of the rectum, to preserve the sphincter ani and to join it to a portion of the colon brought down to take the place of the extirpated diseased portion of the rectum. The operation was a success. The author showed the proctologist a reprint of an article by Dr. Slaughter on the use of penicillin in the treatment of lymphogranuloma and a personal communication he had received from him, and the patient was given penicillin postoperatively in the hospital.

About six or seven weeks after this operation, a second operation was performed doing away with the colostomy.

Conclusions and Additional Remarks

1. Lymphogranuloma venereum is a systemic disease with many local manifestations. The task of unification and final coordination of its various syndromes is still taxing the ingenuity of the investigators. Various complications of this systemic disease have been reported by several observers: Thus, to mention but a few of them, Oliphant, Powell and Perrin (29) have reported a case of lymphogranulomatous ophthalmitis. David Scott called attention to a case (31) of recurrent meningoencephalitis. Zarafonetis (30) mentioned two cases of meningoencephalitis in lymphogranuloma venereum, and Pollard and Hellendall reported in the *American Journal of Obstetrics and Gynecology* (44:317-324, August, 1942) a case of death due to intraperitoneal rupture of a strictured lymphogranulomatous rectum during

parturition (33). The palliative treatment of this condition, as practiced by some clinicians, consists of periodic dilatations of the rectal stricture, either digitally or by means of diathermy. The use of estrogens, in amounts of three to five times their usual therapeutic dose, is a recent recommendation. It softens the mucosa by increasing its vascularity and permits sufficient dilatation to relieve the patient of the distressing symptoms caused by the stricture. (A. D. Seley *et. al., Jour. Clin. Endocrin.* 5:301, 1945.) However, if we shall bear in mind the possibility of various complications we shall not be satisfied with such palliative measures as stretching the stenosed rectum or doing colostomies: we will be striving instead to cure this condition, obstinate as it may be.

2. Lymphogranuloma is a hard disease to cure, but when proper methods are used, the prognosis is far from being a hopeless one.

3. The author considers sulfamerazine the sulphonamide of choice, though he may be willing to alternate it for short periods of time with sulfathalidine in order to give the patient the benefit from the local effect of this new drug.

4. Specific antigenic therapy, autogenous serum, and especially lygranum have their place in the treatment of this affection. Lygranum is useful both for diagnostic and therapeutic purposes.

5. For best results attention to the patient's general health must supplement the specific therapy with sulfonamides, lygranum and other medicinal agents.

The author suggests that anyone interested in this subject should watch for reports on the use of penicillin in the treatment of lymphogranuloma. So far only very few physicians have tried this method of treatment (27 and 28); those who have used it, have found it successful.

In conclusion, the recent experiments of C. Levaditi and A. Vaisman should be mentioned, for they seem to disprove the generally accepted idea that penicillin is not effective in such virus diseases as lymphogranuloma venereum.

These investigators injected mice intracerebrally, with the virus of lymphogranuloma venereum and prevented the development of lymphogranuloma encephalitis, which usually follows such injections, by a simultaneous administration of penicillin; a total dose of one million Oxford units per kilogram was given subcutaneously.

In a later paper (*Bull. Acad. de Méd.*, Paris, 129: 556-558, 1945) they reported that the above mentioned total dose of one million Oxford units per kilogram given in four subcutaneous injections proved to have a curative effect on Nicolas Favre's disease (lymphogranuloma venereum).

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(*Continued on page* 38)

LYMPHOSARCOMA OF THE STOMACH*

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In medical literature it is often easier to find records and information concerning an excessively rare condition, than to learn about those which occur frequently. Lymphosarcoma of the stomach is just such a case. New growths of the stomach are, unfortunately for mankind in general, common enough; but gastric sarcomata make up no more than one or two percent of these. In 1939, Earl S. Taylor found five proven cases of primary lymphosarcoma of the stomach written up in the files of the Presbyterian Hospital, N. Y., and was able to collect one hundred and fifty-two cases from the literature up until 1937. In 1940, Madding and Walters of the Mayo Clinic, studied sixty-seven cases of gastric sarcomata, thirty percent being large, round cell lymphosarcoma, and thirty-two percent small, round cell lymphosarcoma. The most recent article the author has been able to find—that of McSwain and Beal of the New York Hospital, published in January 1944—reported on twenty cases of lymphosarcoma of the gastrointestinal tract, seven of which were in the stomach. They were selected from a total of 149,469 admissions to the New York Hospital. These figures, taken more or less at random, give an idea of the relative infrequency of lymphosarcoma of the stomach.

Pathological Examination

The typical morphological picture of reticulum cell sarcoma is described by Madding and Walters, as one in which the lymph follicles have been invaded and destroyed by large pale cells, the nuclei of which are of "bizarre configuration", showing "round, oval, reniform and horseshoe" shapes. They found that these cells were two to three times the size of those seen in malignant lymphocytoma, larger than immature lymphocytes and showing some evidences of phagocytosis. The chromatin was "diffusely dusted" throughout the nuclear substance, its nucleoli very inconspicuous. There was considerable cytoplasm which was eosinophilic in character. Everywhere in the tumor substance, small but mature lymphocytes could be made out, and irregularities in the size and shape of many of the cells was observed. In general, the cellular structure was loose, but in certain areas much more compact. The long axes of the tumor cells ran parallel to the fibers of any connective tissue near them. Invasion of the lymphnodes, as well as the blood vessels, in some sections was widespread.

The gastric growth which Paul and Parkin detected with the gastroscope, is described as follows:

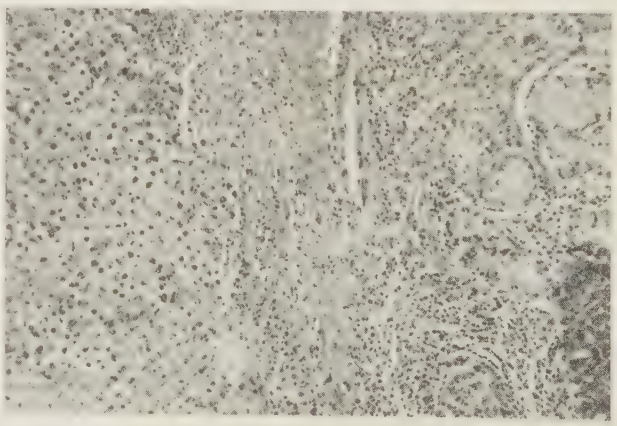
"On the greater curvature, extending to both the anterior and posterior walls, there was an ovoid lesion about 4 cm. long and 3 cm. wide, which had a sharply elevated dusky, red retaining wall about 1 cm. high. The center of the lesion was partly ulcerated, and there was some bleeding in the wall itself. The entire lesion had the appearance of a flat, saucer-shaped mass saddling the greater curvature. Just posterior to this mass, adherent mucus and submucosal hemorrhages were noted."

After the specimen had been removed by a subtotal gastrectomy, it was found that "The lesion extended through the wall of the stomach and there was involvement of the serosa. There was considerable thickening in the area, but there was no induration around the ulcer margin. Microscopically, the lesion revealed a superficial ulceration with acute inflammation. The mass proper, consisted of neoplastic cells which were densely packed. There was a minimal amount of diffusely dispersed supporting stroma. The neoplastic cells had extensively infiltrated, and had largely replaced the normal gastric wall. There was no evidence of arrangement of the neoplastic cells into any structural pattern or of any secretory activity. The individual cells were rounded and contained rather large nuclei. They appeared to be immature cells of lymphoid origin."

The pathological report on the author's own case is strikingly similar to those just cited. It reads:

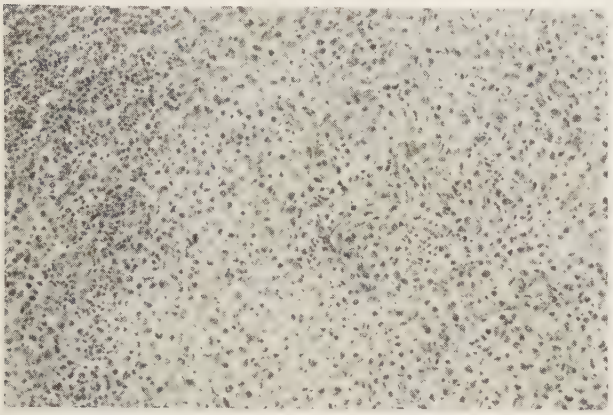
Gross Examination: Two-thirds of the stomach present. There is an ulcerating lesion on the posterior midportion. The ulcer is cup-shaped, the size of a quarter, perforating posteriorly through all the layers of the wall. The neoplasm involves the lesser curvature for 3.5 cm., and the greater curvature on the inferior aspect, for 6 cm. There are many soft glands in the fascia, at both the greater and lesser curvatures.

Microscopic Examination: Throughout this section, the entire histological structure is replaced by a tumefaction which is composed of a diffuse growth of lymphocytes of unequal size and shape, and uneven staining qualities. The lymphocytes have hy-



*From the second surgical service, Unity Hospital, Brooklyn, N. Y.

perchromatic nuclei which show mitotic figures. The reticulum is quite scant. The tumefaction also affects many of the blood vessels.



Differential Diagnosis

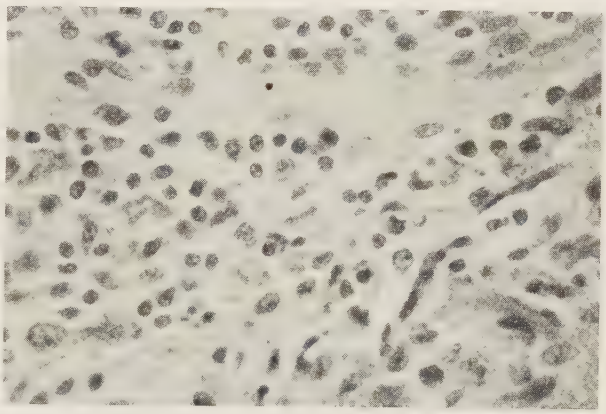
Diagnosis of gastric lymphosarcoma is extremely difficult, the lesion seldom being recognized before operation. Of the fifty-four cases of all types of sarcomata of the stomach, concerning which Balfour published a study in 1930, only one preoperative diagnosis was substantiated at the intervention. In the sixteen years since elapsed, however, some improvement has taken place. The gastroscope came into practical use in 1933, and by its employment a few lymphosarcomata of the stomach have been recognized, although not positively identified until a postoperative examination of the excised tissue had been carried out. In nine hundred gastroscopic investigations, Paul and Parkin found but one lymphosarcoma. Five previously reported cases are cited from literature in their report, made in September 1944.

Lesions occurring in the stomach, which may be confused with lymphosarcoma are chiefly, malignant lymphocytoma or small round-cell lymphosarcoma —which some pathologists do not attempt to differentiate—the "very cellular carcinoma" described by Madding and Walters; endothelioma, and Boeck's sarcoid.

As is the case with all types of gastric neoplasia, the symptoms of lymphosarcoma are not characteristic, and are often so very indefinite that they give no hint of the precise nature of the lesion which is producing them. On the other hand, if the possibility of this particular type of growth is kept in mind, and the clinical findings are carefully correlated with those described in proved cases of the lesion, one can occasionally arrive at a diagnosis. The patient's age is of importance, even though the reports of different observers usually fail to agree on this. In McSwain and Beal's series of seven cases there were four females and three males, their ages varying from forty-three to sixty-five years of age. The graphs made for Madding and Walters showed the peak of incidence of lymphosarcoma of the stomach to be between forty and forty-nine years, and that seventy percent of the tumors occur between the fourth and seventh decade of life. Their youngest patient was twenty-two, the oldest sixty-six, but the average was 46.7 years of age. Balfour and McCann averaged the ages of their fifty-four cases, as sixty-one years, but it must be remembered that these were not lymphosarcoma alone, but all types of gastric sarcoma. In later papers, reporting on lymphosarcoma alone, the average age would appear to be considerably less. One gets the impression also, though the author has found no figures to confirm it, that all types of new-growths of the stomach are being reported with increasing frequency, particularly in the lower age groups.

As regards sex incidence: At the Mayo Clinic, men outnumbered women six to one. Other reports, such as that of Douglas (1920) and Cheever (1932), claim that there is no noticeable sex difference, but later writers seem to think that the incidence among males is distinctly higher.

While x ray examination of the barium-filled stomach has proved most useful in revealing a neoplastic growth in the stomach, it has not served to distinguish lymphosarcoma from other sarcomata, especially not from gastric carcinoma, the usual finding of the roentgenologist. Neither does correlation with the clinical findings help very much, for the vague and indefinite symptoms are common to both.



While no single symptom is of outstanding value, taken together in comparison with the data obtained from the patient's personal history and the general estimate of the physical condition, a great deal may be learned. Taylor makes mention of "pain of the ulcer type" which he has found to be "a constant and often an outstanding symptom." Dyspepsia and anorexia are prominent findings, but he seldom elicited a long history of a lack of appetite and a loss of weight; a certain degree of emaciation, however, is not unusual. Another point stressed by this author, hematemesis, which he saw but twelve times in his series—five personal cases and one hundred and fifty-two gathered from literature up until 1937 —when present, especially in a relatively young patient, when the growth is not causing obstruction, strongly suggests lymphosarcoma. He also believes that lymphosarcoma is more liable to induce perforation than does carcinoma, but if a growth is far

enough advanced to perforate, it is likely to be beyond the help of the surgeon, and the diagnostic value of that sign is not very great.

Treatment

Today, the same as when Balfour wrote sixteen years ago, subtotal gastrectomy is the universally favored treatment in all but the most advanced cases. More recent writers, Earl S. Taylor for example, favor radiation therapy, McSwain and Beal assert that "roentgenotherapy should be given in every case of lymphosarcoma of the gastrointestinal tract unless the operator and surgical pathologist are certain that the lesion has been completely eradicated." They add that "irradiation should be started as soon as the wound is healed and the patient has become ambulatory". The thesis published by the Scandinavian, Forssman in 1943, is entirely devoted to the employment of radiation, both for diagnosis and therapy, in gastric lymphosarcoma and reticulosarcoma.

Case History

The author's own case was as follows:

A thirty-nine year old married woman was referred to Unity Hospital by her physician, Dr. R. Klein, on December 19, 1944, with a history of epigastric pain during the preceding four months. The pain, which bore no relation to her meals, began in the epigastrium and radiated to her back. Two months before her entrance to the hospital, the patient had begun to vomit, usually in the morning, "foul-smelling stuff" which at times showed streaks of blood. She had no appetite since the onset of the symptoms, had lost twenty-five pounds in weight and felt exhausted on the slightest exertion. The family history was irrelevant; she had never undergone surgery, and the medical history was negative. Her two children were living and well.

Physical examination: She had the appearance of chronic illness. Abdominal palpation suggested a mass and fullness in the epigastrium, and there was a systolic murmur at the apex of the heart. The blood pressure was 115/72; respiration 20; pulse 80; temperature 100.4°F. The blood count was: hemoglobin, 30 percent; red cells 2,450,000; white cells 7,000; polymorphonuclears 67; lymphocytes 28; mononuclears 1; eosinophiles 4. There was nothing in the urine, but the stool showed blood, 4 plus. A gastric analysis revealed free hydrochloric acid, 15; total acid, 62. The Wassermann reaction was negative. The total protein was 4.17 percent; albumin 2.7 percent; globulin 1.47 percent.

X ray examination: The gastrointestinal series indicated an extensive defect on the greater curvature of the stomach, suggestive of a neoplastic growth. The bulb was normally filled. There was a slight gastric retention at the end of six hours, but no abnormality of the colon after twenty-four hours. The impression of the findings was carcinoma.

Gastroscopic examination: (performed at another hospital) "Surrounding the pylorus, on the anterior wall and part of the greater curvature, there was an irregular whitish mass. It was covered with blood in several areas. One area in the region of the lesser curvature was ulcerated, forming a crater. This was filled with dark-red blood."

Tentative diagnosis: Adenocarcinoma of the mid-portion of the stomach, with perforation to the pancreas posteriorly.

Treatment: Previous to the operation, which was performed on December 21, 1944, the patient was given a transfusion of 700 cc. whole blood. A second transfusion was administered while she was on the operating table. A sub-total gastrectomy was carried out, with an anterior anastomosis, the excision including the capsule of the pancreas, a wide section of the gastrohepatic omentum and the gland-bearing area of the gastrocolic omentum. On opening the abdomen, there was revealed an ulcerating mass in the mid-portion of the stomach, involving both curvatures and perforating into the body of the pancreas posteriorly. Throughout the gastrohepatic and gastrocolic omentum many enlarged lymphatic glands were in evidence, the glandular enlargement extending as high as the cardiac end of the stomach.

The postoperative course was uneventful, the patient being discharged on January 1, 1945. X ray treatment was given between January 17th and March 23, 1945. The factors were 200 K.V., 50 cm. F.S.D., 0.5 mm. of copper and 1 mm. aluminum filtration. Two abdominal portals were used—one anterior and one posterior, 20 x 12 centimeters. 100 r. to each portal—to a total of 1,500 r.

At the last report (March 1946) this patient continues to remain in good condition.

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ACUTE CORONARY THROMBOSIS

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The case presented here refers to a man, sixty-one years of age, who suffered from an attack of coronary thrombosis on December 26, 1942. During the acute attack, severe cardiocirculatory collapse developed. The pulse rate dropped from his average rate of 72 to 40, and the systolic blood pressure fell from 135 to 80 mm. Hg. pressure. Pain was not prominent. No morphine, or other sedation was needed, in fact, stimulation was indicated. The sustained stimulation with the usual cardiacs, although did not bring about any noticeable improvement, might have contributed to the preservation of the cardiac function at this lowered level, in view of the tendency toward progressive deterioration.

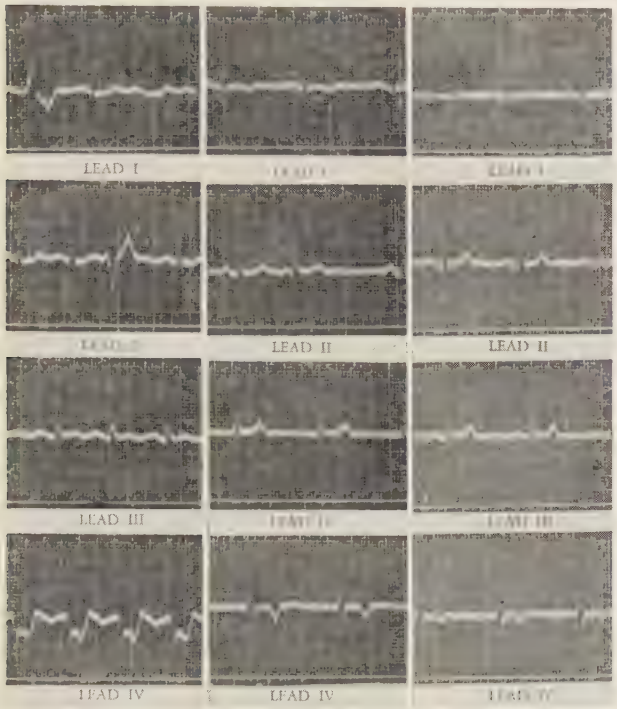

Fig. 1.—Angina pectoris, (hypertensive crisis). Fig. 2.—Six days later. Fig. 3.—One month later.

The collapse lasted for about two hours, when suddenly the tide turned. An abrupt, dramatic improvement, was spurred on by an emotional outburst which was precipitated by the sudden arrival of his son and wife, who were notified by telephone and asked to rush to his bedside. They reached the sickroom at a moment when the patient seemed to have abandoned all hope, and had probably realized in his agony that he was doomed and that he might pass away without saying farewell to his family. This might have shocked him the more, inasmuch as he certainly did not realize the seriousness of his condition, when prostrated as he was, he left his home in order to see his doctor in the belief that he only had one of his customary attacks of angina pectoris. If anything, he experienced somewhat less pain than usual. With the turn of events he fell into the opposite extreme, from optimism to deep despair.

The emotional outburst on rejoining his family undoubtedly stimulated his cardiac function, and the increase in cardiac activity produced unexpected results, which had not been possible to obtain previously, even by repeated caffeine, adrenalin and coramine injections, or by the administration of alcohol, etc. At the moment of reunion, the picture changed as if by magic, and his despair gave way to hope. Revitalized, his ashen grey color changed

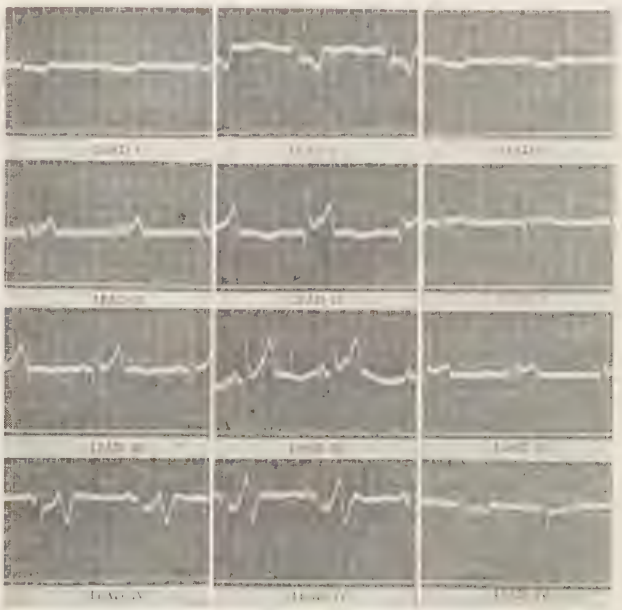

Fig. 4.—Acute coronary thrombosis, 2-3 T-3 type. Four and one half hours after attack. Fig. 5.—Seven hours after attack. Fig. 6.—Twenty-two hours later.

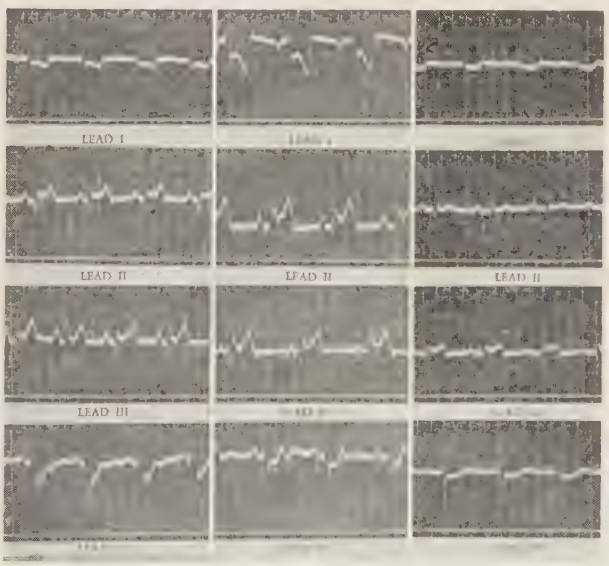

Fig. 7.—Thirty-two hours later. Fig. 8.—Forty-five hours later. Fig. 9.—Seventy hours later.

instantaneously to a healthy, full flushed, red color, the dyspnea disappeared, the bloodpressure and cardiac rate returned to normal and the prostration passed. The emotional reaction turned the scale and the cardiocirculatory collapse disappeared altogether.

The customary medical advice and the general attitude is to keep the patient away from all kinds of excitements and unnecessary physical and mental strain, in order not to put additional strain on the tissues already acutely damaged. The unusual experience and observation in this case illustrates the potential rôle of an emotional impetus as a cardiac stimulant. Here, the emotional outburst was not only well tolerated, but the heart responded favorably to it and it gave impetus to an increased and fully sustained cardiac activity, which was not achieved by means of pharmaceutical cardiac stimulation. The author's approach in administering stimulants, instead of the customary sedatives such as morphine, etc., was after all well justified by these experiences.

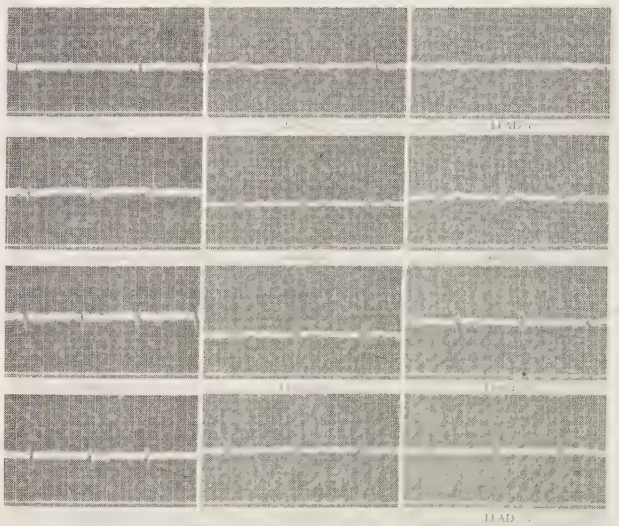

Fig. 13.—Four months, twenty-five days after attack. Fig. 14.—Ten months after attack. Fig. 15.—Eighteen months after attack.

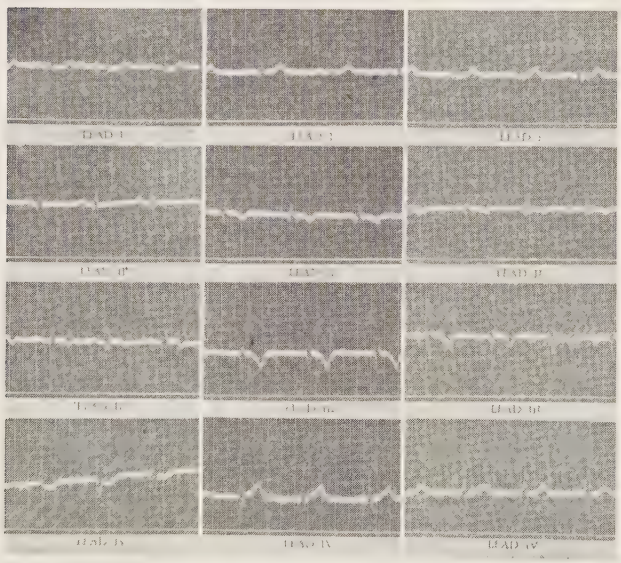

Fig. 10.—Five days later. Fig. 11.—Twenty-two days later. Fig. 12.—Fifty-two days later.

The case presented unusual features in more than one respect:

1. The electrocardiographic changes were of the greatest severity, one might have characterized them as of a stormy character. The alterations and the deflections, especially in the coronary waves, reached extreme proportions, unusual magnitude in elevation and depression.

2. There was a marked incongruity between the severity of the clinical picture on the one hand and the electrocardiographic changes and patterns on the other; although they both are supposed to be dependent upon the same presumptive cause, i.e., upon the extent and location of the damage wrought in the infarcted musculature of the heart.

3. The electrocardiographic changes presumably started immediately after the onset of the attack. Four and-a-half hours later the changes recorded were already very marked. The clinical course following the two hours' severe attack, changed into an uneventful picture, which remained so throughout the six weeks' observation time, recovery being complete and undisturbed. In spite of the uneventful course, the alterations in the electrocardiographic pattern continued to develop and change nearly hourly, for three days at least, with temporary remissions in the patterns in between, only to be followed again by stormy coronary waves of changing character.

Prior to the coronary attack, the patient had been suffering from angina pectoris for well over a year. Exactly one year before the coronary thrombosis, the author happened to observe an attack of angina pectoris during a hypertensive crisis and recorded the electrocardiographic tracings. During this painful attack, (Fig. I.), the blood pressure rose from its otherwise normal level to 200 systolic and the electrocardiogram showed marked signs of coronary insufficiency, the main feature being very deep depression of the S-T segment in Lead IV. Less marked S-T depressions were noted in Lead I. Frequent ventricular premature contractions were recorded throughout. Lead III was suggestive of an auricular flutter, with a 2:1 block. The patient did fairly well on medical treatment and the electrocardiographic changes returned rapidly to nearly normal, leaving only a moderately inverted T_4 and a very low T_1 as the only sign of pathological import. (Fig. III).

During the acute attack of coronary thrombosis a typical posterior infarction developed with Q_3T_3 type. The electrocardiographic tracings included in this paper are self-explanatory.

Six months after the coronary thrombosis, the patient had resumed his regular work as an architect, and outside of occasional angina pectoris attacks experienced as a rule, only after some physical strain or upon emotional upsets, the patient is doing rather well. In tracings at that period, only Q_3 with moderately inverted T_3 remained as reminders of the severe myocardial damage. In still later tracings, the only electrocardiographic change reminiscent of the coronary thrombosis, was the Q_3, as the T waves in all the four leads returned to normal.

49 East 88th Street.

RECENT ADVANCES IN MIGRAINE THERAPY

EDWARD E. EDMONDSON, M.D.
Amarillo, Texas

Migraine is still in the class of uncertain disorders, and its causes have been regarded in many different lights by all investigators. Its association with the complicating symptoms of nausea and vomiting has caused it to be regarded as a reflex reaction to a gastric disorder. Its connection with extremes of nervousness has given it the rôle of a neuropathic manifestation, and has gradually led to the hypothesis that it is due to vasomotor disturbances in the circulation of the structures at the base of the brain, and it is now regarded as a pressure symptom from a basal vascular disturbance.

The writer has approached this problem from his experience as a rhinolaryngologist. While the author was a student of rhinology, the lecturer showed the class a case of migraine, hemicrania, or sick headache, as it is called in different medical circles. The class examined the head of the patient and found it to be quite tender on only one side of the scalp, the line of tenderness stopping suddenly at the midline of the head. It was reported by the patient that the affected side felt extremely sensitive; also a throbbing sensation was felt that was synchronous with the heart beat. The pressure among the bloodvessels at the base of the brain might cause such symptoms and this would classify it as a vasomotor phenomenon involving the scalp.

The lecturer had not heard of vascular disturbances in the basilar vessels, and therefore sought the cause in the nasal cavity. Armed with a small pledget of cotton, he took a very small probe and gently explored the surface of the mucus membranes of the nose on the involved side. He came upon a point of pressure between the outer and inner walls of the nose where slight pressure of the probe gave the patient much additional pain. He then passed a pledget of cotton, saturated with a 4 percent solution of cocaine, around the point of pressure contact; within fifteen minutes the throbbing disappeared and the patient became comfortable without any further medication. The writer saw this same procedure repeated several times while he was a student in this class, and thus realized that the pain of migraine could be caused by using a little pressure at the point of contact between the sides of the walls of the nose; that is, the point where there is an increase in the local pain and reflexes. There was no effort to find a remedy for the contact pressure, since in the author's personal observation, most patients were temporarily relieved by applications of cocaine. Release from a recurrence of the symptoms seemed to be a pursuit worthy of study.

Some years later, while aiding in the development of a compound, the author observed that a solution of three metalic salts of copper, silver and zinc would effect a gradual reduction in the size and sensitivity of nasal structures due to nasal allergy. Approximately ninety days of application of this solution, repeated daily, would shrink the intumescent structures and produce a tolerance of those tissues to the presence of allergens of any respiratory type. This suggested a possible relief for migraine.

Case Histories

CASE I.—A woman who suffered from migraine presented herself for treatment. She gave a history of being subject to migrainous headaches since childhood. The attacks appeared approximately once a month, increasing in severity each time, until nausea and vomiting occurred, after which the attack subsided. They usually lasted from five to seven days and opiates gave little relief. The author found the ever present contact point between the inner and outer walls of the nose and instead of applying the usual cocaine solution, had the temerity to place a tampon of the antiallergic solution between the points in close contact, which of course, increased the pain for a short time but which, to the author's surprise, became much less within twenty minutes; so much so in fact, that the patient insisted that she was comfortable, even though the nerves of the scalp were still tender to pressure. In this case, the author gave the patient a small bottle of adrenal chloride to use in the event that the pain should recur before she came for treatment on the following day; however, she did not return for six months. She appeared at that time, to return the medicament she had been given, and to say that she had been free from pain since the application of the tampon, which was previously described.

Two years later, the patient returned and stated that she felt that the prodomal symptoms were reappearing. The same treatment was again instituted and for the next four years, she reported continuous freedom from the migraine symptoms.

CASE II.—The next case of importance was that of a man, aged seventy-five. He had recently returned from St. Louis, where he had visited a doctor in order to obtain relief from an acute unilateral headache. He had returned without relief and reported that his nose had been sprayed with an oily solution each day for four days without benefit. The author used the same treatment as before and inserted the tampon between the points of contact so firmly, that the contact areas were whitened and became more pale than the rest of the tissue. Although relief was not instantly effected, a second application late that same afternoon brought about the desired relief.

CASE III.—This case was that of a painter who had migrainous headaches of several days' duration and who had resorted to aspirin for relief. The day he came to the author's office, he had taken 60 grains of aspirin with no appreciable relief. A metallic salt solution was packed into the nose and the first

tampon gave him relief within thirty minutes. This was followed by repeated applications, until the nasal intumescence and color became normal. After a period of three years, he has not had a return of the migrainous symptoms.

CASE IV.—The next case was that of a very stout woman with a history of periodic attacks of migraine since her childhood. An applicator armed with a cotton tip, revealed the point of contact, which increased the migrainous throbbing on pressure. The first application of the solution gave some relief from the pain, but no relief from the scalp tenderness. Six additional applications were required to effect a complete cessation of all tenderness of the scalp, although the throbbing stopped after the second application, some eight hours later.

Summary

It has been the author's observation that when the nasal probe with the cotton tip indicates the point of exceeding tenderness, the cessation of the symptoms follow the use of the medicated tampon applied to the pressure area.

Cases of sinusitis must be differentiated from migraine; this can often be done by means of sinus transillumination. However, the contact pressure test is a strong diagnostic aid in determining whether the originating cause of the pressure of two opposing contact points is due to swelling in the nose, rather than vasomotor disturbances at the base of the brain. The medication in use at present, although intended for cases supposed to originate at the base of the brain, is somewhat misleading to the allergist who follows the assumption that it is of brain origin; actually it is also calculated to shrink the intumescence of the nasal structures.

The intranasal therapy is so simple, that the rhinologist should make the search for the painful point of contact and apply the solution daily; that is, if the condition is not improved by one application of the solution. To make the nasal examination, the physician should be well acquainted with the nose as an organ, subject to variations in intumescent reactions. This knowledge will enable him to find the painful pressure points and institute the treatment.

1004 West Sixth Avenue

A NEW OPERATION FOR STERILITY*

Caused by Acute Anteflexion of the Cervix

Report of a Case

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New Rochelle, N. Y.

While acting as an instructor in one of the sections of the gynecological services of the New York Post Graduate Medical School and Hospital, a patient, Mrs. B. B., of child bearing age and in the fourth year of married life, consulted the author in regard to the problem of sterility.

On examination, she was found to be suffering from an acute anteflexion of the cervix, which was the cause of her sterility. No other pathology was present. In this condition, the cervix instead of being in its normal location, downward and backward toward the concavity of the sacrum, was flexed near the internalos of the cervix and was located under the uterus, the external os looking anteriorly. The cause of the flexion was probably congenital, due to softening of the cervical tissue. The weight of the uterus forcing the softened cervix against the unyielding, downward and backward concavity of the sacrum, caused the lower part of the cervix to flex to a downward anterior position. Finally, the flexed cervix reached the concavity of the coccyx curving anteriorly and upward and the continued pressure of the uterus forced the flexed cervix to lie under the uterus, the external os looking anteriorly.

To correct the following conditions: bring the cervix to its normal position, remove the pressure of the uterus from the cervical canal and enlargen its diameter, and eliminate the possibility of a recurrence of the flexion of the cervix, the author devised the following operation which resulted in the birth of two children.

Operative Technic

After disinfection of the areas involved, the anterior and posterior lips of the cervix should be grasped with a tenacula and No. 1 and No. 2 Martin dilators should be passed into the uterus. With the narrowest curette that can possibly enter the cervical canal, cervical mucosa and the endometrium should be curetted, brining away some of the granulation tissue. The cervix should then be split into an anterior and a posterior flap, about one-half of an inch of the estimated internal os, where the cervical tissue becomes firmer. The anterior flap is then given one-sixteenth of an inch more tissue, causing the external os to lie in a more natural position. A wedge-shaped mass of muscle tissue is then removed from the cut sides of each flap with the base looking externally, including the angles between the flaps. The cutting away of the muscle tissue enlargens the diameter of the cervical canal. The cervical mucosa should be removed about one-sixteenth of an inch from the borders of the anterior and posterior flaps. This maneuver gives broader surfaces for adhesion purposes. A suture is then passed at the angle between the flaps, from the vaginal mucosa underneath the cervical mucosa, through the cervical mucosa and the vaginal mucosa and then tied. Similar sutures are passed downward. The posterior flap is cut about three-eighth of an inch from the estimated internal os, where the tissue is firmer and one-eighth of an inch from

*Preliminary Report.

the anterior flap. Cutting away part of the cervix prevents flexion of the cervix and allows more tissue to the anterior flap, which places the external os in a natural position. The four corners of the flaps are then rounded out and wedge-shaped masses of the muscle tissue and the mucosa are removed from the borders for about one-sixteenth of an inch, as previously mentioned. Finally the suturing is completed as indicated above.

Previous to the operation, the husband and wife must both be examined. The husband, to see if he can impregnate his wife, his wife to see that she is free from constitutional diseases, such as tuberculosis, pulmonary diseases, heart disease and nephritis, which would endanger her life if she were pregnant. The wife must also be free of local pathologies, such as closed fallopian tubes, pus tubes, cellulitis, fibromyomas occluding the cervical canal and any other condition preventing pregnancy.

Summary

A new operation for sterility caused by acute anteflexion of the cervix, and a presentation of the various steps devised to correct the pathology, is herein given.

In a communication dated December 25, 1944, in answer to the author's inquiry, Mrs. B. B. stated that following the operation she gave birth to two children.

30 Montgomery Circle

EYE EXAMINATIONS AND EYEGLASSES

JOSEPH SHANKS
Chicago, Ill.

Scientific eye examination, and eyeglasses in connection with ophthalmology and general medicine as known today, were hardly developed and recognized until the nineteenth century was well advanced. In fact, on this subject there still exists a good deal of confusion, indifference and little enthusiasm on the part of certain sections of the medical profession, as well as a certain part of the intelligent general public. Thus, we witness the various cults, licensed and unlicensed, in connection with eyeglasses and eye examinations which often obscure and confuse the real issue.

For many centuries we have known about the blind. Many things have been done for their comfort and health (especially in the past eighty or ninety years) and the future is even more hopeful. Phenomenal progress has been made in the field of eye examination, diagnosis and treatment of eye diseases since the year 1851.

Eyeglasses

The principal reason for prescribing eyeglasses for anyone is to artificially bring the eyes of the individual on a par with the eyes of another individual, of a similar age, with normal vision. The reason for a thorough eye examination is of course to rule out disease—the reasons for using drops, refraction and the various methods of tests and treatment are only a means to gain this end. Although the historical and romantic aspect of eyeglasses, spectacles and magnifiers of old China, Italy and other parts of the world would be of great interest to many readers, the writer believes, however, that the more practical phase of eyeglasses should embrace only such points as are absolutely vital in connection with vision and health. While vision is probably God's greatest gift—so valuable and remarkable, yet so seemingly inconsequential to some, unless something very serious happens—negligence seems to be a human trait. What lies beyond the limitations of the human eye of poor sight? What are the possibilities of adding comfort or even restoring human eyesight (in refractive errors) by means of eyeglasses? Only in fantasy may one with normal eyes and vision guess! It is not surprising, that it has taken hundreds of years for us to gradually learn the intricate studies of physics, optics, lenses, anatomy, etc. From the observations of a number of individual scientists, our knowledge has been gathered, systematized and preserved.

In the routine testing of vision by means of lenses and prisms in connection with refraction, vision and health examination, the author would like to bring out in the briefest manner the meaning of light, the laws of refraction, lenses and the means by which rays of light affect them. Therefore, we shall first discuss light, or that physical form of energy which, after entering the eye and affecting the sensitive parts of the retina, stimulates in the mind the impression of vision—vibrations of ether. We may also add that light is a very rare elastic force which is diffused over the universe, coming from the sun and stars, with a velocity in a vacuum of about 186,000 miles a second. Its speed is naturally retarded when it strikes a denser medium (glass, water, etc.), and the velocity of retardation depends a good deal on the density of such a medium; it finally regains its former speed (unless absorbed by some opaque medium) upon emerging into the air again. It must be remembered that bodies propagating rays or waves of light are called luminous; bodies through which rays penetrate easily are called transparent, those through which rays can penetrate less easily are known as translucent, and bodies through which rays of light cannot penetrate at all, are called opaque. Thus, when light strikes the surface of a body it may either be reflected, refracted (bent), absorbed, or diffracted (decomposed).

Refraction is generally defined as the bending of a ray of light in passing obliquely from one medium to another of different density. This bending is caused by one side of the ray having its speed increased or decreased according to the density of the second medium (refraction always takes place be-

tween the media—never in one medium alone). Also, when a ray of light passes from a rarer to a denser medium it is always bent toward the perpendicular; when it passes from a denser to a rarer medium, it is bent away from the perpendicular. The amount of refraction is the same for any medium at the same obliquity, and it is called index of refraction; air is taken as the standard and is called 1; water, 1.33; crown glass, 1.52; flint glass, 1.62; pebble, 1.54; diamond, 2.4—the greatest index of any known medium.

A lens may be considered as a transparent substance—flint or crown glass—ground with a regular curvature on one or both of its opposite surfaces, but not parallel to each other. It may have convex, concave or cylindrical surfaces. Lenses may be looked upon as being made up of a number of prisms with different refracting angles—convex or plus lenses, of prisms placed with their bases together; concave or minus lenses, of prisms with their edges together. What is a prism? Simply a wedge-shaped, transparent body of glass having two plane sides, used for the purpose of bending rays of light towards its base and also in making tests for muscular imbalance. More remarkable are the phenomena, or the way convex, concave and cylindrical lenses focus light and how such lenses refract the light passing through them into farsighted, nearsighted and astigmatic eyes.

In convex lenses, for instance, the optical center acting as a glass plate with parallel sides, does not change the direction of the rays that pass through it. The rays that pass near the optical center, being affected as by weak prisms with the base toward the optical center, are turned a little toward the center. Those rays piercing the prism slightly further from the optical center encounter a more or less stronger prism with its base turned the same way—more decidedly bent toward the center. Those still further removed from the central ray, passing through the point where the lens acts as a still stronger prism, are bent still more toward the central ray, and so on throughout the lens. The further a ray is from the center, the more it is turned toward the central ray. Therefore, the rays from all parts of the lens are turned in, so as to intersect the central ray some distance back of the lens.

In the case of the concave lens, the ray passing through the optical center is not refracted, as the other rays are all turned from it. The concave lens is also to be regarded as a series of prisms, the weakest near the center and the strongest the furthest from the center. In other words, the prisms have their bases all turned from the center and the effect is to scatter the light, not to concentrate it.

A point which should be stressed in connection with refraction, eyeglasses and prevention of blindness is that the fitting of eyeglasses is but one part of the oculist's efforts. He examines the eye, not only from the refractive error point of view, but also from the medical standpoint. The oculist looks on the eyes as part of the human body. In a certain percentage of cases he finds that the trouble is not the lack of eyeglasses, but that the eye disturbance is due to some other physical cause. In children, eye conditions may develop as a result of some head congestion, improper use of the eyes or improper light; they may also occur as a result of infected tonsils, adenoids, teeth or sinuses. Moreover, in certain conditions, especially in children, the ophthalmologist prescribes eyeglasses as a temporary expediency—not as a permanent routine—in order that the eyes may get the proper comfort and relief for the necessary development period.

In the case of astigmatism, the cylindrical lens focuses far differently. For instance, all along the axis of the lens the two surfaces are exactly parallel, as they are at the optical center of a spherical lens, so that the rays which pass through the axis are not refracted at all. The rays that pass through other parts of the lens are turned toward the axis, or from the axis, according to whether the lens is convex or concave; and the focus to which they are gathered, or from which they are made to converge, is a line parallel to the axis instead of a single point, as in the spherical lens.

Summary

Correct refraction and the use of prisms if necessary, must be of interest to the entire profession. We no longer should think that the enormous studies of refraction, physics and optics—often a fundamental phase in eye health and in the prevention of blindness can be dismissed with a shrug of the shouders; nor must one leave the diagnosis in the hands of certain lay persons, or regard eyeglasses as a mere accessory to good looks and magnification.

3109 N. Lincoln Avenue

Lymphogranuloma Venereum

(*Continued from page 29*)

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2067 Clairmount Avenue

Editorials

Centenary of Sulphurous Ether As An Inhaled Anesthetic

On October 16, 1846, Dr. John Collins Warren, famous Boston surgeon, removed a tumor from the angle of the jaw of Gilbert Abbot without pain and under ether, with Dr. William T. G. Morton as the anesthetist. From that moment to this day, the controversy of priority has raged, and it still rages and boils. The matter of bestowing the greatest good upon the greatest number, has often been lost sight of in the glowing heat of argument. Although millions of people have been snatched from the jaws of death through beneficent surgery which could have been carried out only under influence of a general anesthetic, the right of priority is argued for, and against, any one of three pioneer investigators, Horace Wells, a dentist, of Hartford, Conn., Crawford W. Long, a physician of Jefferson, Ga., and William T. G. Morton, a dentist, of Boston, Mass.

Ether had been inhaled as a prank, by some students in Long's room at the University of Pennsylvania, amid much boisterous and riotous behavior which, had it been due to alcohol instead, would have been set down as debauchery; apparently the effects did not last long as not enough was taken to introduce the third stage of anesthesia. Later, Long, in his early years of practice in Georgia, operated upon several minor cases with ether as a desensitizer, but thought so little of pushing his claim, that he did not become aroused until he discovered that Wells and Morton were doing the same.

The French Academy of Sciences at Paris in the eighteenth and early nineteenth centuries was the court before which all medical investigators or inventors wished to appear in order to receive recognition. At that time the United States did not have any similar authority to place its stamp of approval (or disapproval) upon a tyro's work. Morton seems to have been the first who presented his memoir before the Paris Academy. (*New Use of Sulphuric Ether.* By W. T. G. Morton, Boston, Mass. Presented by M. Arago in 1847. New edition, with a foreword by John F. Fulton, M.D., Yale University. New York: Henry Schuman, 1946.)

However, Horace Wells seems to have had a more successful protagonist, Dr. C. S. Brewster of Paris, who mailed a letter to Wells probably in 1848. It never reached Wells as he had taken his life on January 24, 1848 in New York, by inhaling chloroform and slashing a femoral artery. Wells had completely lost his mind and had been committed to "the tombs" for hurling acid upon the clothing of innocent pedestrians. The letter is printed on page 107 of Dr. Victor Robinson's book, *Victory Over Pain;* A History of Anesthesia. New York: Henry Schuman, 1946. Dr. Brewster said he had just come from a meeting of the Paris Medical Society where they had voted Wells an honorary member of the society after three previous deliberations. "On two previous occasions Mr. (Edward) Warren, the agent for Dr. Morton, was present and endeavoured to show that to his client the honor was due, but he, having completely failed, did not attend the last meeting . . . yet the first person who discovered and performed surgical operations without pain was Horace Wells, and to the last day of time, must suffering humanity bless his name . . . Your diploma and the vote of the Paris Medical Society shall be forwarded to you . . . Believe me, ever truly yours, Brewster." Thus, confusion became worse. If we could not determine priority in this country, how may we expect the Frenchmen living in a time before radio, telephone or fast mail existed, to determine it for us without controversy.

Morton had named his discovery, which he had prepared by adding various substances to disguise the smell of ether, *Letheon,* and had applied for Letters Patent, not an unethical procedure in those days; however, we find no record of a granting of any patent. Sir William Osler examined all of the facts in the controversy thoroughly, and in fact, he had in his famous, extensive library at Oxford, all of the papers, monographs, etc., extant. In justice to all, Osler determined that Morton should receive the greater acclaim since it was he who had actually anesthesized Dr. Warren's patient successfully. It is interesting to note the contempt which Dr. Warren showed toward the discoverer and applier of ether, before and at the beginning of the operation, but when he was convinced that "this is no humbug" he climbed aboard the victory chariot, and in a paper entitled *Etherization with Surgical Remarks,* Boston 1848, he gleefully wrote: "The introduction of ether into surgical operations was done by my hands." True, he gave permission to the anesthetist to proceed, thereby laying himself open to criticism in case of failure or the death of the patient; but his future surgical success depended entirely upon the use of ether, although he later wrote about the advantages of chloroform.

We have mentioned three sources of reference published at this centenary time; perhaps the most useful and the briefest for anyone who wishes to

explore the data at hand, is that compiled for the Yale Medical Library by Dr. John F. Fulton, chief of the department of physiology, Yale University. It is called *Centennial of Surgical Anesthesia. An Annotated Catalogue of Books and Pamphlets Bearing on the Early History of Surgical Anesthesia.* This is a brochure of one hundred and six pages and it is published by Henry Schuman, N. Y., 1946. Mr. Schuman has also published simultaneously, Morton's *Memoir* and Dr. Victor Robinson's book already mentioned.

Ether is still considered by some anesthetists, notably Dr. Paluel J. Flagg, the anesthetic of choice, in most cases, because of its safety, ease of administration and general excellence for prolonged operations.

Typhoid Fever In Upper Manhattan

The October, 1946 issue of the *Quarterly Bulletin* of the City Department of Health, contains a very unusual and interesting report of an outbreak of typhoid fever in Washington Heights during August of 1946. The unusual feature was that the carrrier, a seventy-six year old woman, had studiously observed all of the department regulations and yet was an unwitting cause of infection by passing along the Bacillus typhosus in twenty known cases.

A vegetable store below her apartment became contaminated by a stoppage in a sewer pipe. The merchant suspected the contamination and threw out all the vegetables near the spot, but he knew nothing of the carrier upstairs. All the facts appeared after a second checkup on everyone in the neighborhood by a department nurse who sensed the situation, discovered the relativity of the drain pipe, carrier and store, and established the source of infection. It was a fine piece of detection and should be commended. The infected members of the families involved did not know each other, had no common meeting place and had not eaten together, but they *did* buy from the same vegetable man. However, none of the patients had been out of town, and a careful screening of all "contacts" gave negative results. All this was prior to the discovery by the astute nurse. There were twelve known typhoid carriers living in the neighborhood, but nothing could be traced to any of them, as they were obeying the mandates of the Board of Health.

As to carriers in general, if the infected person follows the rules, if he exercises scrupulous care of his hands, and is restricted to his own cooking utensils, soap, towels, etc., he is considered a safe member of the community. However, hands infected from the anus, the right hand in particular, are always a menace to the non-immune, whatever type the organism may be. Quite recently, our health department made a determined effort to clean up unsanitary eating places; however, this would seem to have greater reference to places than to persons Who among us has found hot water and a hand scrubbing brush in any lavatory outside a hospital? During the soap shortage, we cannot expect to find that commodity, and the old tincture of green soap, has well nigh disappeared. Occasionally, one does run across one of those hand-punch devices from which some kind of unknown concoction emerges when tried out, but the brush is usually lacking, and if it were present, how can one suppose that it is germ-free? It is not a nice thought when one is about to have a meal in an eating place to contemplate the chances of contamination from doors, doorknobs, faucet handles and the like. The Colon bacillus for example, is ubiquitous as every physician knows, but since it is an inhabitant of everyone's colon, possibly a few additional ones may be swallowed with impunity. What about the Protozoa and the enormous family of Staphylococcus and Streptococcus? These are found in the stools of apparently normal persons, but introduced into a new host they may be reactivated to produce an upset stomach, diarrhea or gastroenteritis, the name making no actual difference.

Some years ago, this reviewer had a culture made from all patients' pus recovered from the maxillary antra. It was more or less astonishing to get a report of Colon bacillus in the nose! Furthermore, why did pus from the right antrum contain Bacillus coli so much more often than the left? Let the reader supply his own answer. Considering how often our hands touch hundreds of contaminated objects each day, how many times we shake hands with a friend or acquaintance, grasp handrails, count filthy bills, etc., isn't it a wonder that we still exist in a fair state of health? Probably we have acquired a relative immunity against many organisms and unless we are subjected to massive doses of especially virulent strains, we give no thought to the matter. It may be just as well, for no one can live in a vacuum. As social beings, we shall always be at the mercy of our fellow citizens who are carriers of some sort. This is especially true in the case of respiratory infections. Try as one will, we cannot escape air contamination, nor put everyone who coughs and sprays germs into our midst, into an isolation chamber. We can merely "exercise due caution", a phrase which may carry either a world of meaning, or no meaning at all.

Getting back to typhoid carriers, it is extremely unfortunate that no way, as yet, has been found to sterilize the intestinal tract, or even to make it surgically clean. The carrier is to all intents and purposes a well person. He has recovered from an attack of typhoid fever and considers himself quite lucky; properly so, but he is inclined to think that doctors, particularly bacteriologists are "pernickety". The germ theory of disease is not likely to interest him very much. Hundreds of cultures from his stools have shown the Bacillus typhosus, and so what? Well, what indeed? One can hardly recommend a typhoid colony of isolation, such as the lepers are obliged to live in, nevertheless, the feces become smeared on toilet seats, underwear, sheets and towels, and it is impossible for innocent persons to remain out of contact at all times, in all places. We can only hope that we are lucky, or partially immune, and keep our own hands and bodies clean. However, sewage is flooded into streams of water by what is called good engineering technique. Most people enjoy bathing and are not particular, or at least not particular enough, to inquire about pollution. The Board of Health has done a splendid job in analyzing polluted waters and in putting up the forbidden sign, but they still have trouble with small boys who know nothing, and care less about sanitation. Here, however, is good news!

"It is estimated that only one typhoid carrier in every ten has been detected and placed under supervision of the Department of Health. This means that there are about 5,000 carriers in the city, 4,500 of whom are unknown. Yet during the last five years only eighty-five cases—an average of seventeen a year—were traced to hitherto unknown carriers. Even the unsupervised carrier rarely passes on an infection. Based on a study of the last five years, four cases of typhoid per 1,000 hitherto unknown carriers were reported as compared with two cases per 1,000 known carriers." This is comforting statistical information; let us hope that it holds good not only now, but for a long-distance future.

The Skin as an Emulsion

According to a prominent dermatologist of New York City, the skin is classified as being composed of two major types. The first is classified as the oil in water emulsion type; the second as the water in oil emulsion type. The physician prescribing for the patient with a skin ailment must take the phase of the skin into consideration. The vehicle may be of greater importance than the active ingredient ordered. If the medicated ointment made for the skin is in the same phase as the skin at the time of application, no further injury is done. For example, a skin in the oil in water phase may be helped if the medicated ointment is in the same phase. No damage has been done; but if it should so happen that the vehicle prescribed is in the opposite phase than the skin at the time of application, further difficulties arise. This is not consciously recognized by all physicians. Yet nearly all physicians order the patient to stop the application of soap and water in every case of skin ailment. They are, in effect, ordering the stoppage of oil in water emulsions. To be consistent the physician should then order his medicament in a water in oil emulsion type vehicle. Lanolin emulsions are water in oil type. The patient who does not do well with lanolin, water in the oil emulsion type vehicles for his skin ailment should be placed on starch water gels or mucilages. These are equivalent to the opposite phase, finished emulsions, when in contact with the grease of the injured skin surface.

Normal soap is the oil in water emulsion type. If the person's skin is the oil in water type and the soap is the oil in water type, the skin can tolerate the soap emulsion. It should not be forgotten that there are two subvarieties of the oil in water emulsion soap. One is soluble, formed with fatty acid and univalent salts such as sodium, potassium and ammonium. The other is the insoluble soap, formed with fatty acid and polyvalent salts, such as calcium and magnesium. Many persons can tolerate the soluble oil in water emulsion type soap and cannot tolerate the insoluble form; the latter is an irritant. The irritation may be caused by the physical character of the insoluble soap, or by its chemical form. The first reason given may be responsible for the lack of confirmative conventional patch tests.

Substitution of one oil in water emulsion phase soap for another oil in water emulsion phase soap does not help the irritated skin. Certain superfatted soaps were once available, purporting to be, in effect, water in oil emulsion type. Many creams offered as substitutes for the oil in water emulsion type of soaps are, in effect, the same soap in cream form. They are the oil in water emulsions with water rather than partially dehydrated oil in water emulsions in soap cake form.

Until now, only trial and error determines whether the skin in health or disease is of the oil in water emulsion type, or of the water in oil phase. It is consideration of these factors, rather than copy book or memory feats, that should determine the prescription the physician writes. The same features should determine the use of cosmetics for the skin.

News Items

Centennial Celebration at the N.Y. Academy of Medicine.—The New York Academy of Medicine will hold its centenary dinner on March 6, 1947 at the Waldorf Astoria Hotel, N.Y. The various sections will hold their usual meetings in March and April. One meeting of each section will be devoted to the centennial celebration. The programs of these meetings will be historical in part, but greater emphasis will be placed on the broader aspects of the specialties and their future in medicine. The programs will be announced at a later date.

University of Illinois.—Dr. A. C. Ivy, vice president of the University of Illinois, has announced that medical research in atmospheric environment and aviation medicine will be accelerated at the university next summer, with the completion of a new physical environment addition to the Research and Educational Hospitals at the Chicago Professional College Campus. He said that the new addition will contain sufficient ceiling height to house large pressure and temperature controlled chambers, a large psychrometric room and an acoustic laboratory.

New Publication.—Legislation promotion, one of the most important cooperative activities of the State Charities Aid Association and its affiliated state and local committees in the field of public health, is the theme of the new publication *Health Legislative Record*.

Beginning with 1907 when the campaign against tuberculosis in the state outside of New York City was started, and the enactment of the basic tuberculosis law in 1908, this twenty-page booklet marks the legislative milestones in the development of public health services down through the years to 1946.

Scientific Developments.—Dr. D. Roy McCullagh, of the research staff of the Schering Corporation, Bloomfield, N.J., and the department of pharmacology, University of Tennessee Medical School, Memphis, Tenn., has been sent to Europe as one of the American experts to examine German pharmaceutical and chemical industrial plants and research institutes. Selected by the office of technical service, U. S. Department of Commerce, Dr. McCullagh will search for additional information on German-developed vitamin, hormone, neurological and biochemical research and products.

Under the Technical Industrial Intelligence Division's investigation program, qualified experts and technicians are sent to Germany to study the many materials, processes and equipment which still remain practically unexplored. The investigators' reports are made available to the Commerce Department.

Acoustical Society of America.—How motion pictures, stroboscopic light and other developments of modern science can be used as tools of research to help solve the mystery of operation of the human ear were recently described by Dr. H. G. Kobrak of the department of surgery, University of Chicago, at a meeting of the Acoustical Society of America. The research technique is expected to be particularly important in correcting hearing defects and developing aids for the hard of hearing.

Rockwell Kent Drawings.—A collection of original drawings by the noted American artist, Rockwell Kent, which have been an outstanding feature of promotion to the medical profession, made by the Schering Corporation, were on display for the doctors visiting the Detroit meetings of the International College of Surgeons, the Association of Military Surgeons and the Michigan State Medical Society. Portfolios of reproductions of the drawings, suitable for framing, are available to physicians and members of allied professions, upon request to the Schering Corporation, Bloomfield, N.J.

Urology Award.—The American Urological Association offers an annual award 'not to exceed $500' for an essay (or essays) on the result of some clinical or laboratory research in urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to residents in urology in recognized hospitals. The selected essay (or essays) will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel Statler, Buffalo, N.Y., June 30 to July 3, 1947. Full particulars may be obtained upon request to the secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis ,Tenn.

Friday Afternoon Lectures.—During the months of January and February, the following lectures in the twenty-first series of Friday Afternoon Lectures will be given at the New York Academy of Medicine:

January 24: Diseases of the collagen system, by Dr. Paul Klemperer, pathologist, The Mount Sinai Hospital;

January 31: Epilepsy and allied conditions, by Dr. William G. Lennox, assistant professor of neurology, Harvard Medical School;

February 7: Sterility in the male, by Dr. Robert S. Hotchkiss, associate professor of urology, New York University Medical College; and Diagnostic procedures in the investigation of sterility in the female, by Dr. I. C. Rubin, clinical professor of gynecology, College of Physicians and Surgeons, Columbia University, and;

February 14: Some problems of menstruation and the menopausal state, by Dr. Ephraim Shorr, associate professor of medicine, Cornell University Medical College and The New York Hospital.

Army Epidemiological Board.—The army epidemiological board was named one of five groups in the fields of medical research and public health administration to receive the coveted Lasker Group Award this month in Cleveland, Ohio. Dr. Francis G. Blake, dean, Yale University Medical School, chairman of the board during the time for which it was cited, accepted the award, a silver statuette, on behalf of the board.

Grant to Educate Deaf Children.—Normal life in a world of silence for deaf children is the principal aim of a new experimental demonstration class at the Cleveland Hearing and Speech Center, a Community Chest Agency affiliated with Western Reserve University.

This educational experiment has been made possible by a grant from the Cleveland Foundation Harry Coulby Fund, and will not only educate deaf children to speak and to understand speech, but will also train both parents and teachers.

According to George J. Fortune, executive director of the center, the experiment is unique in Cleveland, and very few other centers in the United States have undertaken such a project.

American Public Health Association.—At the seventy-fourth annual meeting of the American Public Health Association in Cleveland, Ohio, November 12-14th, the following officers were elected: President, Dr. Harry S. Mustard, dean, School of Public Health, Columbia University; president-elect, Dr. Martha M. Eliot, associate chief, Children's Bureau, United States Federal Security Agency; vice presidents, Dr. Gregoire F. Amyot, provincial health officer, Provincial Board of Health, Victoria, B.C.; A. Fernos Isern, commissioner of health, Puerto Rico; H. A. Whittaker, director, division of sanitary engineering, Minnesota School of Public Health; treasurer, Louis I. Dublin (incumbent) vice president and statistician, Metropolitan Life Insurance Company.

American Society of Tropical Medicine.—The American Society of Tropical Medicine held its annual scientific meeting in Miami, Fla., in conjunction with the Southern Medical Association and the National Malaria Society, on Monday, November 4th through Thursday, November 7th. At a meeting of the Academy of Tropical Medicine, following the academy dinner on Wednesday, November 6th, Colonel Karl R. Lundeberg, chief of the preventive medicine division, Office of the Surgeon General, U. S. Army, was accorded the signal honor of being elected to the academy.

Retiring president of the Academy and the Society was Dr. James Stevens Simmons, dean and professor of Public Health of the Harvard University School of Public Health, Boston, Mass.

Lions Club Scholarships.—Awards of the four Lions Club scholarships for advanced study of eye disease at the New York University College of Medicine were recently announced by Dr. Currier McEwen, dean of the college.

The doctors, selected by the university's department of ophthalmology for the $500 awards are: Edward Danforth, Bainbridge, N.Y.; Charles Goldsmith, Catasauqua, Pa.; Jonathan L. Harris, Elberon, N.J., and Hugh McGhee, Jeffersonville, N.Y. All are postgraduate students at the College of Medicine and are specializing in ophthalmology.

The Eye Conservation Fund, Inc., of the New York Lions Club initiated the scholarship plan last spring with a gift of $2,000 to the college. Ernest R. Fryxell, chairman of the Eye Conservation Fund, stated that the Lions Club will provide four scholarships annually, for advanced study of eye diseases at New York University.

Mississippi Valley Medical Society 1947 Essay Contest.—The seventh annual Essay Contest of the Mississippi Valley Medical Society will be held in 1947. The society will offer a cash prize of $100.00, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third. Contestants must be members of the American Medical Association and residents of the United States. The winner will be invited to present his contribution before the twelfth annual meeting of the Mississippi Valley Medical Society to be held in Burlington, Iowa, October 1, 2, 3, 1947. Further details may be secured from Dr. Harold Swanberg, secretary, Mississippi Valley Medical Society, 209-224 W.C.U. Building, Quincy, Ill.

Chinese Army Medical Officers Study American Veterans Administration.—Six top-ranking Chinese Army medical officers are guests of Dr. Paul R. Hawley, chief of the Veterans Administration medical service, to make a detailed study of the Veterans Administration's procedures in handling the medical problems of American war veterans. The Chinese medical administrative team is composed of Major General Hsi-lin Hsu, surgeon general of the Chinese Army Ground Forces; Colonel Chan Chao, the Army Service Forces; Colonel Ling-sun Woo, division of medical service; Colonel Tah-mou Peng, division of technical service; Colonel Ping Shiao, division of rehabilitation and Major Wen-tah Yang, hospital administration branch. The medical officers are spending six months in the United States studying the overall organization and functions of various military and civilian medical organizations, for the purpose of revising the medical service of the Chinese Army.

Third American Congress on Obstetrics and Gynecology.—The Third American Congress on Obstetrics and Gynecology will be held from September 8-12, 1947 in the municipal auditorium in St. Louis, Mo.

Dr. Fred L. Adair, Chicago, Ill., will again be the general chairman. While the third congress will be similar in scope and program to the two previous meetings it is planned that it will be a larger one. The program under the direction of Dr. William F. Mengert, Dallas, Tex., is being arranged to appeal to the obstetrical and gynecological specialist, to the general practitioner interested in those fields, to the hospital administrator and to nurses.

American Board of Obstetrics and Gynecology, Inc.—The next written examination and review of case histories (Part I) for all candidates, will be held in various cities of the United States and Canada on Friday, February 7, 1947.

Arrangements will be made, so far as is possible, for candidates to take the Part I examination (a written paper and submission of case records) at places convenient for them. Candidates who successfully complete the Part I examination, proceed automatically to the Part II examination to be held June 1-7, 1947 in Pittsburgh, Pa. Notice of the exact time and place of the Part I and Part II examinations will be sent all candidates well in advance of the examination date.

Requests for further information and application blanks should be addressed to Dr. Paul Titus, secretary, 1015 Highland Building, Pittsburgh, Pa.

Clinical Society of Reconstruction Hospitals.—A meeting of the Clinical Society of Reconstruction Hospitals will be held Wednesday evening, January 15, 1947, at 8:30 p.m. The program will consist of the presentation of the following cases: Fracture head of the radius, fracture capitulum of the right elbow, excision of the head of the radius and the removal of the distal fragment of the humerus; result, three years postoperative, and Avulsion fracture of the olecranon process with a marked separation of the fragments and a partial tear of the triceps tendon, open reduction; result, six months postoperative, by Dr. Henry H. Ritter; Fracture, coronoid process of the ulna; result, two months posttrauma, and Comminuted fracture of the olecranon process; result, six weeks postoperative reduction and internal wire fixation, by Dr. David Goldblatt; Arthroplasty of the elbow joint for ankylosis; result, six months postoperative, and Fracture-dislocation at the elbow involving the head of the radius, open reduction; result, eight weeks postoperative, by Dr. Harry V. Spaulding, and Old fracture head of the radius with an organized hematoma, limited motion of the elbow; result, one year postoperative, by Dr. Walter D. Ludlum, Jr.

X Ray Control Unit.—A complete description of the automatic 200 MA. x ray control unit, which requires only three simple steps for selection of the operating factors, is contained in a new booklet announced by the Westinghouse Electric Corporation.

After the radiologist has selected the milliamperage, kilovoltage and time, the control automatically arranges all internal circuits for the selection of the correct tube, focal spot, timer, instrument panel meter and meter scale, and all necessary adjustment factors for accurate operation. The booklet pictures the control panel in full detail, and lists such features as the x-actron continuous filament regulation, trigger switch and ignitron timer. The associated transformer is also described in detail.

Copies of the new booklet may be secured from the manufacturers upon request.

Merck Fellowships.—To help young scientists who have demonstrated marked ability in research in chemical or biological sciences, Merck & Co., Inc., is establishing a fund of $100,000 with the National Academy of Sciences for fellowships in the natural sciences. These Merck Fellowships will be administered by the National Research Council.

The Merck fellowships are open to United States citizens who have demonstrated unusual talent for experimental research and have already acquired the training in chemistry or biology equivalent to that represented by the degree of Ph.D. Annual stipends will range from $2,500 to $5,000, depending upon individual circumstances. Copies of the announcement are available through the National Research Council, 2101 Constitution Ave., Washington, D.C. Applications are to be filed by January 15, 1947; decisions concerning awards will be made shortly after March 1st, and fellowships will become effective July 1, 1947.

Western Reserve University Lectures.—According to a recent announcement made by Dean Leonard W. Mayo, Yale University, Dr. John P. Peters, professor of medicine, Yale University, and secretary and treasurer of the Committee of Physicians for the Improvement of Medical Care, Inc., will be the leader of an institute on "Whither Medical Care and Human Values" to be conducted January 16, 17 and 18th by the School of Applied Social Sciences, Western Reserve University, at the Carter Hotel, Cleveland, Ohio. Such questions as, what are the factors contributing to this paradoxical situation in the United States which embodies the highest standard of living economically and a far less enjoyable position in national health, will provide the framework of the institute. Attendance at the institute will be limited to fifty persons who are graduates from colleges or schools of social work with a minimum of three years' employment in a social or health agency.

Personal.—Dr. Harry M. Weaver, acting director of research for the National Foundation for Infantile Paralysis, has been named director of research for the organization. Previously on the faculty of Wayne University College of Medicine, Detroit, Mich., Dr. Weaver joined the National Foundation staff last February, as assistant to the medical director. Dr. Weaver will be responsible for the research program of the National Foundation, through which grants are made to established research organizations such as universities, public health laboratories, hospitals, etc., to enable scientific investigators throughout the country to carry on their programs of research designed to find means of prevention or the cure of poliomyelitis.

Dr. Esmond R. Long, director of the Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis, Philadelphia, Pa., has been appointed to the post of director of research of the National Tuberculosis Association. He continues to serve as tuberculosis consultant to the Army and Veterans Administration, as well as a tuberculosis consultant to the U. S. Public Health Service.

Dr. Maurice L. Moore, assistant director of research, Frederick Stearns & Co. Division, Sterling Drug Inc., has been elected as chairman of the division of medical chemistry of the American Chemical Society for 1947.

Colonel Arden Freer, M.C., chief of the medical consultants division, Office of the Surgeon General, was one of four official delegates from the United States to attend the First Inter-American Medical Congress in Rio de Janeiro, held in September 1946.

Dr. Balduin Lucké, honorary consultant to the Army Medical Library and formerly deputy director in charge of research at the Army Institute of Pathology, has resumed his position as professor of pathology at the University of Pennsylvania.

Dr. Henry R. Carstens, Detroit, Mich., has been appointed medical director of Veterans Administration Branch Office No. 3, which directs Veterans Administration activities in Pennsylvania, New Jersey and Delaware. A fellow of the American College of Physicians and diplomate of the American Board of Internal Medicine, Dr. Carstens commanded the Seventeenth General Hospital as a colonel of the U. S. Army Medical Corps during World War II at Naples, Italy.

Dr. Carl Ferdinand Cori, professor of pharmacology and biochemistry, Washington University, St. Louis, Mo., received the honorary degree of Doctor of Science at the annual commencement of Yale University.

Dr. Atherton Seidell, Army Medical Library Consultant, has returned to Paris to resume his work of setting up microfilm services for the exchange of medical literature. His efforts are directed toward the establishment of international documentation in medical bibliography.

Letter From Britain

(From Our Own Correspondent)

Matters in Britain are in an unsettled state and medical affairs seem somewhat tangled, but there is hope that in time all will be well. It goes without saying that after a war such as the last, it could not be expected that peace would at once bring contentment and plenty. We must wait, holding to the belief that while radical changes will be made in the conduct of professions and businesses, in the long run most, if not all, of these changes may be for the best and that the British medical profession, with its long record of useful and honorable service to the country, may be able to continue in a similar way.

Hunterian Society

The Hunterian Lecture will be given at Mansion House, London, on January 20, 1947 by Professor Debriseuy Louvain. The subject will be "Hypotension in intracranial injuries".

Sir Lionel Whitby and Mr. E. A. Porritt Invited to Harvard

Sir Lionel Whitby and Mr. E. A. Porritt have accepted the invitation of Harvard University to occupy chairs of medicine and surgery, respectively, for a short period. Sir Lionel Whitby has already started for the United States.

Demonstrations in Neurology and Psychiatry

At St. George's Hospital Medical School, London, clinical demonstrations in neurology and psychiatry are to be held at 4:30 p. m. every Thursday by Dr. Anthony Feiling and Dr. Desmond Curran. The first demonstration was given by Dr. Feiling on Thursday, December 5, 1946.

Great Telescope Memorial to Sir Isaac Newton

Parliament is to be asked to vote a sum of money to establish an observatory which will house a giant telescope and other astronomical instruments, as a national memorial to Sir Isaac Newton. This announcement was made at the tercentary celebrations which took place in London some nine months ago. It is said that the application has been accepted in principle, and that the money will be forthcoming. It has been decided that the Newton Observatory should contain a reflector of a one hundred inch diameter.

Middlesex Hospital Dinner

The annual dinner of the Middlesex Hospital was held in London on October 4, 1946. Dr. G. E. Beaumont presided. Many retirements were announced and Dr. H. E. A. Boldero, the dean, said that he regretted the circumstances that obliged some of the young men who were to have entered the Middlesex Hospital Medical School this autumn, to join the Armed Forces instead, and that he hoped for a change of policy by which military service, if required, would follow the completion of the medical course, instead of the situation as it is at present.

South Africa's Gifts to the British People

On October 18, 1946, Field Marshall Smuts, the prime minister of South Africa, handed the prime minister of Britain a bank draft for $980,000, an offering to the people of Britain from the people of Durban and the province of Natal. It is the wish of the donors that this money be spent on a hospital or on a similar institution. Field Marshall Smuts also presented a gold certificate for $4,925,000, an offering from the people of South Africa and British protectorates, 'to be used for the advantage of the British people'.

Westminister Hospital

It is rumoured that Westminister Hospital is to be demolished and the site occupied by a government building, as the situation is among the finest in London. In the meantime, it may be said, that this hospital has broken new ground by establishing a department of medical photography under the fulltime charge of a doctor. Part of the work will be to assist in clinical investigation, which will enable the staff to keep permanent visual records and to compare serial studies; one film on inflammation has already been made. This is a valuable innovation in England, as photography has much to offer to the doctor and student as well.

David Anderson-Berry Silver Gilt Medal

A David Anderson-Berry Silver Gilt Medal, together with a sum of money amounting to about $400,000, will be awarded during 1947 by the Royal Society of Edinburgh to the person who, in the opinion of the council, has recently produced the best work on the therapeutic effect of x rays on human diseases. Applications for this prize are invited from those interested. They may be based on both published and unpublished work and should be accompanied by copies of the relevant papers. Applications must be in the hands of the general secretary of the Royal Society, 22 George Street, Edinburgh 2, not later than January 31, 1947.

Physiotherapy in Britain

In recent years, physiotherapy in Britain has come to the front as a rehabilitating measure. A body for the training, examination and registration of physiotherapists was started in 1894 when the I.S.I.M. was founded. A Royal Charter was granted to that society in 1920 when it took the name of the Chartered Society of Massage and Medical Gymnastics, and in 1943 became known as the Chartered Society of Physiotherapy. The standard of training has been raised progressively and when the new curriculum is introduced, the training will extend over three years. A strict ethical law is in force for members of the Chartered Society. Before being admitted to the Register, a chartered physiotherapist must sign a statement "not to undertake any case except under the direction of a given registered medical practitioner". The wars have given the physiotherapists ample opportunities for demonstrating the value of this form of treatment with good results.

Philip Hill Chair of Biochemistry

Dr. Frank Dickens, F.R.S., has been elected to the Philip Hill Chair of Experimental Biochemistry in the Courtauld Institute, London. The Chair is an independent research post, endowed by Mrs. Philip Hill in memory of her husband. Dr. Dickens has done important research work on insulin, sex hormones and tissue metabolism. At the request of the British Medical Research Council, he did some special research on the toxic effects of oxygen on brain metabolism and recently published four papers on the factors which control the carcinogenic action of certain hydrocarbons.

Child Health in Britain

No. 245 in the *Child Health Nutrition Bulletins,* has been recently issued by the Political and Economic Planning Commission, as a study of the services dealing with the nutritional health of children, complementary to the study of the maternity services published early in the year. It is of great interest considering the food situation and the National Health Service Bill. In the first place, responsibility rests upon parents, and what is termed as "retreat from parenthood", which seems to be going on in Britain, must be arrested. The main point of the argument for the proper care and bringing up of children, is that a medical service for children should be fundamentally a health, rather than a sickness service, that is, to prevent sickness rather than to treat it when acquired; but without a high standard of medical teaching and much extended research on such problems as breast feeding, nutrition, physical education, and the influence of social factors on child health, the best organized medical service can do little.

Heberden Society's Dinner

This society, named for a great physician, gave a dinner in London on October 25, 1946. Dr. C. W. Buckley presided and in his opening address pointed out that a new stage in the campaign against rheumatism was beginning. The disease will be studied from its origin; the first objective being to educate the general practitioner about the early manifestations of the disease. The public, too, should be taught the importance of seeking prompt medical advice. Few, however, who have spoken on the problem of rheumatism have stressed the point that its solution or partial solution, lies as much in prevention, as in treatment after the disease has gained a hold. Of course, it will be practically impossible to stamp out the various forms of this disease but some of its forms may be prevented by judicious measures. At the dinner and meeting of the Heberden Society, Dr. Loring T. Swain, said that since the formation of the American Rheumatism Association, the general public's interest had been aroused. Moreover, in every American university the students were taking courses relating to the disease. Dr. Birger Strandell pointed out that the Swedish Medical Society had recently established a rheumatism section, as the problems in Sweden in regard to rheumatism are similar to those in Britain.

Neuropathology

Textbook of Neuropathology. By ARTHUR WEIL, M.D., associate professor of neuropathology, Northwestern University Medical School. Second edition. Revised and enlarged. With numerous illustrations. New York: Grune & Stratton, Inc., 1945. Pp. 356. Price $5.50.

In the second edition of his textbook, the author has brought his material up to date with the latest advances in experimental neuropathology, investigation of the vitamin deficiencies, the experimental production of tumors of nervous tissue, the experimental study of the pathology of the different shock treatments in psychoses, and has increased the number of illustrations from two hundred sixty to two hundred eighty-seven. There are very few textbooks on this suject in English; therefore, this volume fills a definite need.

The book is a review of the present state of knowledge in neuropathology and contains a collection of facts which have been scattered in the literature. A chapter on staining methods is included among the discussions on changes through autolysis and fixation, diseases of the neuron, gilia and its pathology, the pathology of the myelin sheath and axis cylinder, anemic softening, arteriosclerosis, inflammation and infections of nervous tissue, intoxications, injuries, degenerative disease, tumors and congenital malformations of nerve tissue.

Dr. Weil emphasizes the fact that the cell is quite different after its removal from the body, from the cell in its natural environment. For example, a few seconds after the removal of a cat's brain, the lactic acid increases greatly. The question of post mortum infection is still to be settled, for microorganisms that were inactive in life may multiply after death. Gas forming bacilli have been demonstrated in "gas edema" of the brain, but the manner of migration of these bacilli has not yet been demonstrated. Post mortum changes may also be produced by the presence of abnormal or increased ferments in certain diseases.

It has been disproven that fixatives, such as formalin, will preserve living tissue. Any change in the osmotic equilibrium between the fixing fluid and the cell, will tend to produce swelling or shrinkage with ensuing artificial changes of the histological structure. If alcohol is used as a fixative in edematous brains and those of young children, many artefacts may be produced by sudden dehydration.

Interesting experimental data that has a definite bearing on clinical application may be found widespread throughout this text, for example; the brain is the organ which has the highest requirement of oxygen. The cortex uses nearly four times as much oxygen as the white matter; it is rare to find the brain of a sixty year old person without gross arteriosclerotic thickening of the large arteries. Following severe liver disease, brain pathology develops, due perhaps to intermediate products of metabolism that escape detoxication in the liver. This has been confirmed by experiments on dogs.

Although clearly written, this is a highly technical book which would be of interest only to students of neuropathology.

Gastroenterology

Cancer of the Colon and Rectum. Its Diagnosis and Treatment. By FRED W. RANKIN, B.A., M.D., surgeon, St. Joseph's and Good Samaritan Hospitals, Lexington, Ky., and A. STEPHENS GRAHAM, M.D., F.A.C.S., surgeon, Stuart Circle Hospital, Richmond, Va., assistant professor of surgery, Medical College of Virginia. Second printing. Illustrated. Springfield, Ill.: Charles C. Thomas, 1945. Pp. 358. Price $5.50.

This is the second printing of this book. It is a comprehensive record of the experiences of both authors with cancer of the lower intestinal segment. In addition to their own experiences, there is correlated the work of other surgeons.

There is the usual emphasis upon early diagnosis and they stress the importance of good cooperation between internist and surgeon. In correlating all previous work, they note that the last decade has introduced few changes in operative technique. The obstructive type of resection is emphasized and full details of technique are given; this is well taken. They wisely insist that, in radical operations, there should be no iron clad rule for, or against immediate primary anastomosis, stressing that judgment should be based upon the individual case. Extensive descriptions of all published forms of operative technique of both the one, and the multiple stage operations are given. They have found no value in the intraperitoneal use of vaccines, but it is disappointing to find no reference to chemotherapy.

It is regrettable that little, if any, attention is given towards a wider effort to conserve the anal sphincter in rectosigmoidal cancer, for which the past few years have exhibited a renewal of interest which seems to be bearing fruit. It is true that certain procedures practised in former years have been more or less abandoned, but, nevertheless, it is the reviewer's belief that it is pertinent to reexamine at least some of these again in the light of the advances which have been made.

The possibilities of radiotherapy are well discussed by Hodges. The older studies are obsolete now. As presently understood, radiotherapy is being used upon the basis provided by studies of tumor sensitivity in relation to histological types. Hodges again summarizes the experience of others and reaches the conclusion that radiotherapy cannot supplant good radical surgery at present and can only be an adjunct to the latter.

The format of the book is pleasing. Text and illustrations are well interspersed. Altogether the book is valuable as giving the viewpoints of a single group and here one may profit by much practical advice.

Ophthalmology

The Eye Manifestations of Internal Diseases. By I. S. TASSMAN, M.D., associate professor of ophthalmology, Graduate School of Medicine, University of Pennsylvania; attending surgeon, Wills Hospital, Pa. Second edition. With 243 illustrations, including 24 in color. St. Louis, Mo.: The C. V. Mosby Co., 1946. Pp. 614. Price $10.00.

For many years ophthalmology has become a recognized branch of internal medicine. In many instances, ocular manifestations appear early in the course of a disease and are often of important diagnostic and prognostic significance. For this reason, the book integrates the eye manifestations with the other medical aspects of internal diseases, and thereby serves the needs of the ophthalmologist and all others engaged either in general or specialized practice. As in the previous edition, the material is systematized, and the style is concise and comprehensive.

The first five chapters provide a description of the normal structure of the eye, a general description of the causes of eye manifestations, and a brief description of the methods of examination and some of the routine tests, methods and appliances employed.

Two chapters are devoted to the structural abnormalities and manifestations. Here the basic and fundamental lesions which may involve the intrinsic structures of the eye are described individually, so that any inexperienced reader may be better able to understand and appreciate the picture of the eye manifestations that follow in the subsequent chapters.

Beginning with Chapter VI, the author presents the essential description of the eye manifestations of different diseases or symptoms of diseases. The important features of the ocular condition are described, together with management, differential diagnosis, treatment and prognosis whenever possible. The text is increased in value by a brief preliminary description of the primary or systemic disease. The descriptions of the eye manifestations of infections and of the infectious diseases include those of all the acute and chronic infectious diseases, with separate chapters on such important subjects as syphilis and tuberculosis. The other infections are conveniently grouped as virus infections, fungus infections, ocular parasites and parasitic infections, and focal infections. A separate chapter is devoted to the eye manifestations of the more important drug and chemical intoxications.

The congenital and hereditary manifestations are considered in a separate chapter. Here are given the ocular conditions found in the more important hereditary and heredofamilial diseases and a description of the congenital eye malformations and anatomical defects of development.

The succeeding chapters deal with the eye manifestations of nearly every systemic disease. A few of the diseases which might not be considered as having any direct eye manifestations and some other inaccurately described eye manifestations are included nevertheless, because they occur at times, either as accompanying factors or as a sequelæ and complications.

New additions include the descriptions of ocular allergy, epidemic keratoconjunctivitis, Hurler's disease, osteopetrosis, lymphogranuloma venereum, Bowen's disease of the cornea, toxoplasmic encephalomyelitis and Purtscher's disease. Many new references and new additions to the diseases, included in the first edition, will also be found.

The treatment of the various conditions include the most recent methods and forms. Treatment with penicillin, since no final reports by reliable authorities were available to the author, has been omitted, except the use of penicillin in the treatment of gonorrheal ophthalmia and ocular syphilis which is mentioned.

As one goes through the text, it is astonishing to see how widespread the eye manifestations of disease are in clinical medicine. Much medical erudition went into the preparation and making of this book. It was bolstered by wide reading, and the writing was well done. There is abundant documentation, and there are many well made illustrations, both in black and white, and in color. The publishers have made the manufacture of the book on a parity with its medical excellence; the materials are good; the print is easy to read and the format is pleasing. The second edition of this book continues the excellent reputation of the first.

Anesthesia

Conduction Anesthesia. Clinical Studies of George P. Pitkin, M.D. Edited by JAMES L. SOUTHWORTH, M.D., senior assistant surgeon, United States Public Health Service, Marine Hospital, Baltimore, Md.; and ROBERT A. HINGSON, M.D., co-director of the postgraduate course in anesthesiology and obstetrics, University of Tennessee, College of Medicine. With 606 illustrations, prepared under the direction of Dr. George P. Pitkin. Philadelphia, London and Montreal: J. B. Lippincott Co., 1946. Pp. xii + 981. Price $18.00.

Beside the work of the late Dr. Pitkin and Dr. Southworth, eight collaborators are listed as writers on special phases of anesthesia. For example, Louis A. Palmer, spinal anesthesia; Drs. William Lemmon and Henry C. Hager Jr., continuous spinal anesthesia; Frederick M. Allen, refrigeration anesthesia; Lyman W. Crossman and Dr. F. M. Allen, clinical methods of refrigeration anesthesia; Drs. Edwards, Hingson, and Southworth on obstetrical application of continuous caudal anesthesia; Dr. A. R. McIntyre, cocaine and synthetic local anesthetics, etc. Dr. Pitkin has a special chapter on neuroanatomy, and Dr. Southworth on therapeutic nerve block.

The term "conduction anesthesia" connotes interruption of nerve conduction, principally sensory, without loss of consciousness. It includes nerve blocking, single-injection and continuous caudal anesthesia plus the varieties of refrigeration etc., mentioned above.

The reader may learn as much from the illustrations, with certain limitations, as from the printed text, although the text is thoroughly readable and illuminating. The intention is to supply both anesthetist and surgeon with such information as he ought to have in the carrying out of both major and minor surgery painlessly, while the patient is fully aware of his surroundings. This is an enormous volume and seems to contain everything anyone might want to know about what is often called "local anesthesia", although it is much more than just that.

Parasitology

Introduction to Parasitology. With Special Reference to the Parasites of Man. By ASA C. CHANDLER, M.S., Ph.D., professor of biology, Rice Institute, Houston, Texas; special consultant, malaria control in war areas, U. S. Public Health Service; former officer-in-charge, Hookworm Research Laboratory, School of Tropical Medicine and Hygiene, Calcutta, India. Seventh edition. With numerous illustrations. New York: John Wiley & Sons, Inc., London: Chapman & Hall, Limited, 1944. Pp. 716. Price $5.00.

The author has had extensive experience in his field and has written an excellent college text, but as a book for the doctor, it is not detailed enough in its application to the practice of medicine.

This is the seventh edition and has been completely rewritten with stress laid on the biological sides of the field, such as; life cycles, epidemiological factors, interrelations of parasite and host, and underlying principles of treatment and prevention. The war aspects of parasitology are emphasized.

In the discussion of the various organisms, the morphology, biology and pathogenicity are adequately covered, but the treatment is much too incomplete for the average doctor reader. However, the college student will, no doubt, be stimulated by the discussion.

There are many excellent illustrations which are clear and instructive. As the author states—"Parasitology has come of age . . . with the world shrunken until it is not more than forty-eight hours between any two capitals of the world, knowledge of parasitic diseases, however strange in our own country they may have been in the past, are of practical and immediate concern to us." With this concept in mind, any college course in parasitology should have this volume as required reading.

Gynecology

Operative Gynecology. By RICHARD W. TE LINDE, M.D., professor of gynecology, Johns Hopkins University and chief gynecologist, Johns Hopkins Hospital. With 309 illustrations in black and white and 15 in full color on 9 plates. Philadelphia, London and Montreal: J. B. Lippincott Co., 1946. Pp. 751. Price $18.00.

While the title of this book conveys the thought that surgery is the chief treatment in gynecological conditions, and this is quite true, the author, nevertheless, realizes that like all other specialties, gynecology embraces the entire individual, mental as well as physical. Therefore we have references throughout the text to psychosomatic medicine in the broad sense; for example, getting a young child-bearing woman into the frame of mind where she is willing to sacrifice her uterus to save her life, a decision that must be made in most instances under grief.

There is also a great deal concerning the coming young specialist in gynecology. The old preceptorial method is highly recommended, especially under long residency in an active service; for only thus can an assistant acquire the technic of the master. However, it is also stressed that the young surgeon must be given the scalpel and be put to work under the guiding eye of his mentor,—a matter that is too often overlooked by greedy operators. The hospital service, therefore, should make certain that operations are distributed to the staff. This can be obtained only in the larger centers, but it needs to be kept in mind everywhere.

The gynecologist must, first of all be a good diagnostician, and a trained general surgeon, for he will find abdominal conditions lying outside the pelvis which he must manage immediately and effectively as the occasion arises. A wide understanding of general medicine including pathology, endocrinology and female urology is imperative. It is assumed that the well-grounded interne has this, but it is by no means the rule.

It is good to read that morbidity and mortality both in obstetrics and gynecology, are being rapidly reduced because of recent advances in chemotherapy and in meticulous pre and postoperative care. Not long ago special writers who make a living in searching out the shortcomings of the medical profession, were deprecating the high mortality of women during childbirth and postpartum. It is easy to prove almost anything by statistics, but if these authors will read and study such outstanding works as this one, they must find much that is worthy of praise, instead of coloring detrimental hearsay statements which are without verification.

The format of this book is excellent as to type, quality of paper and detailed illustrations. Everyone concerned in publishing this volume has done an excellent job.

Electronics

The Working Electron. An Introduction to Electronics. By RAYMOND F. YATES, author and lecturer. Illustrated. New York and London: Paul B. Hoeber, Inc., Medical Book Dept., Harper & Bros., 1946. Pp. 247. Price $2.50.

This book explains the fundamentals of electronics, our newest science, in all its ramifications from the automatic door to the atomic bomb. It is written in clear, precise English and will give readers with even little or no scientific training, an understanding of the background and beginnings of this vitally important science and also its marvelous applications in many different fields—in industry and art, in biology and chemistry, in photography and medicine, and in geology and transportation.

The Working Electron is no over-done "popularization" but is a sound presentation of the fundamentals of a subject which is fascinating in its own right. The text is supplemented by more than a hundred drawings and photographs. The shop foreman, the plant executive, the corporation official and the student approaching the subject for the first time will all find this book a convenient and interesting "first course" in electronics.

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JANUARY 1947

Medicolegal Notes

Damages Increased

An award for suffering, the Second Circuit Court of Appeals, says, U.S. Fidelity and Guaranty Co., vs. United States, 152 F. 2d 46, is always insusceptible of quantitative measurement, so that the court is slow to interfere with any such award on appeal, but although the damaged condition of a longshoreman's spine may be partly congenital, and where the fall, however little etc., might have injured the spine of a normal man, injured the longshoreman enough to subject him to a long and severe ordeal, it was held that, in accordance with the general doctrine, the shipowner must completely indemnify him, regardless of his idiosyncrasy.

The injured man was first treated in a hospital for twelve days; later, his spine was "fused" in another hospital, and he was another month in that hospital. He was then taken back to the first hospital for two and a half months, in a cast for thirteen weeks, resulting in the development of a case of stone, which had to be removed, and another operation kept him in the hospital for two weeks and left him unable to work for six months. The court thought the lowest award should have been $4,000 and raised the lower court's award of $1,300 by $2,700.

This was the only point appealed by the injured person. In addition to the award for suffering, the District Court awarded $10,000 for loss of earning power and $1,700 for hospital expenses, neither of which items was appealed.

The injured man was a rigger and diver for a machinery company, who, in going on board the ship, used a Jacob's ladder which slipped and threw him on the stringpiece of the dock, inflicting the spine injuries. The libellant was his employer's insurance carrier, which had paid the injured man the amount of the award.

Qualification as Expert on Medical Questions

Judgment for plaintiff was reversed and a new trial ordered for error in the exclusion of the testimony of a medical witness and a hospital record made at his direction on the sole ground that he was not, at the time of the accident on the report, licensed to practice in New York. Black vs. Ackerman, Special Term 63 N.Y.S. 2d 445.

The court cited as authority for its decision People vs. Rice, 159 N.Y. 400, 410, 54 N.E. 48, 51, where it is said: "After a careful consideration of the subject we have reached the conclusion that if a man be in reality an expert upon any given subject belonging to the domain of medicine, his opinion may be received by the court, although he has not a license to practice medicine. Such testimony should be received with great caution, and only after the trial court has become fully satisfied that upon the subject to which the witness is called for the purpose of giving an opinion, he is fully competent to speak."

Death From Sensitivity to Prescribed Dosage

In an action on the double indemnity clause of a life policy the jury's answers to special questions were summarized by the appellate court as 1, a physician administered the usual doses of sulphanilamide and aspirin to the insured for the illness which he had prior to his death; 2, the insured was sensitive to such doses; 3, his death resulted solely from such doses so prescribed; 4, such death, from the doses given, was unexpected.

On appeal from a judgment for the plaintiff, the Texas Court of Civil Appeals, National Life & Acc. Ins. Co. vs. Hannah, 195 S.W. 2d 733, said: "We have already held in the prior litigation that if the death of Mr. Hanna was caused by the taking of a drug under doctor's prescription, in ordinary manner and dosage usually resulting in good health, but, due to bodily sensitivity, producing instead an unforeseen and fatal result, such result was within above-quoted terms of the policy as a death by 'accidental means'. Undoubtedly the law of the former case is controlling of the instant jury findings and undisputed facts". Judgment for plaintiff was affirmed.

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Damages

An award of $2,100 for pain and suffering to the date of the trial and $5,500 for disability in the future was held not so excessive as to indicate passion and prejudice of the jury in an action, where injuries were sustained by a guest in an automobile that collided with a tree. Jansen vs. Herkert, Wisconsin Supreme Court, 23 N. W. 2d 503. The plaintiff, a twenty-five year old woman, sustained a cerebral concussion, fracture of her ribs and a badly comminuted fracture of the left foot. She underwent several operations and was left with a short and permanently rigid foot. A one-and-a-half inch scar remained on her right cheek and she continued to suffer headaches. She was in the hospital for about three weeks, and the muscles of her left arm were permanently atrophied. The doctor and hospital bills were paid, amounting to $2,680.

Evidence of Extent and Duration of Disability

The general rule is that self-serving statements are not admissible, when made to a doctor who is not called to treat a party to a law suit as a patient, but only to examine him to determine his condition without an attempt to treat or cure. There is then no incentive to speak truly, in order to give the doctor a true basis for diagnosis and enable him to prescribe the proper medical treatment. There may be some inducement to distort facts for the purpose of a trial if one is in the offing, but when one party offers a portion of a writing, his opponent may introduce the remainder, provided it is not irrelevant to the issues on trial and is explanatory as an aid to a proper understanding of what has already been received. Where a medical expert for the plaintiff, who had examined him solely to testify as to the extent and probable duration of his disability had made a report to the plaintiff's attorney in three parts; headed, "History", "Physical Examination" and "Opinion", and who gave a copy of it to the defendant's attorney, and cross-examined the doctor in reference to the report, he was held entitled to offer in evidence the "Physical Examination" part of the report. The plaintiff was allowed, over the defendant's objection, to offer the entire report in evidence as the remainder of a document of which the defendant had already introduced a part. Grobelny vs. W. T. Cowan, Inc., 151 F. 2d 810.

Private Hospital's Liability

An action against a private hospital was made by a patient who was burned with hot water which had been placed within her reach for the purpose of making tea. The patient was recovering from a major operation and under the influence of narcotics, but the hospital employee left her room immediately. The California Lutheran Hospital, 163 P. 2d 860, reversed a judgment for the hospital (158 P. 2d 579), and directed the trial court to enter judgment on the jury's verdict, which was for the plaintiff.

The court applied the standard of conduct required of a hospital in the care of its patients, laid down in Wood vs. Samaritan Institution, 26 Cal. 2d 847, 851, 161, P. 2d 556, 558. In that case, it was held that the care required of a hospital depends on the circumstances of each particular case, and the known condition of the patient. "A hospital is liable for want of ordinary care, whether from incompetency of a nurse or failure in duty by a duly qualified nurse. On the other hand, a private hospital is not an insurer of a patient's safety, and the rules as to care required, are limited by the rule that no one is required to guard against, or take measures to avert that which a reasonable person under the circumstances would not anticipate as likely to happen".

Under that standard, the court held that there was in this case sufficient evidence from which the jury could find negligence. There was violent conflict in the evidence, both between the witnesses on the one side and those on the opposite side; but, the California Supreme Court did not disturb the finding of the jury, resolving those conflicts where there is any substantial evidence supporting it, even though there is a conflict in the evidence produced by the prevailing party.

The plaintiff was about sixty years of age, and the operation was a serious one, requiring about two hours to perform. The injury happened forty-eight hours after the operation, since which the plaintiff had had no oral nourishment. She was suffering from pain and narcotic drugs were administered to her. No drinking tube was furnished with the hot water and tea. The employee serving it did not, on leaving, advise the plaintiff that the water was hot, although she testified that she told the plaintiff she would have a nurse help her with the tea. The evidence was held to establish that the plaintiff was not contributorily negligent as a matter of law; measuring her conduct by the standard of a person of ordinary prudence under the circumstances.

The plaintiff's physician who gave the order that the plaintiff be served tea, knowing the customary manner of serving it, which was followed in this case, could not be held liable in place of the hospital. "The nurses attending the plaintiff were employed by the defendant hospital and were not special nurses in the employ of either the plaintiff or her physician. Likewise, the person who served the tea was the defendant's employee. The defendant was bound to supply proper attendance and care to the plaintiff, and that duty extended to furnishing and supervising the administration of nourishment. It cannot be said that because the doctor ordered tea to be served the plaintiff, that he was making the nurses and the server of the tea his servants and employees to the exclusion of the defendant hospital as the employer. The hospital still had direction and control over its employees and was responsible for the care to be observed by them in the process. It should be noted that a nurse or physician may be the servant of a hospital, thus requiring the application of the doctrine of respondent superior, even though they are performing professional acts".

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†M.Rec., 158:420, 1945 *U. S. Patent No. 2,395,372

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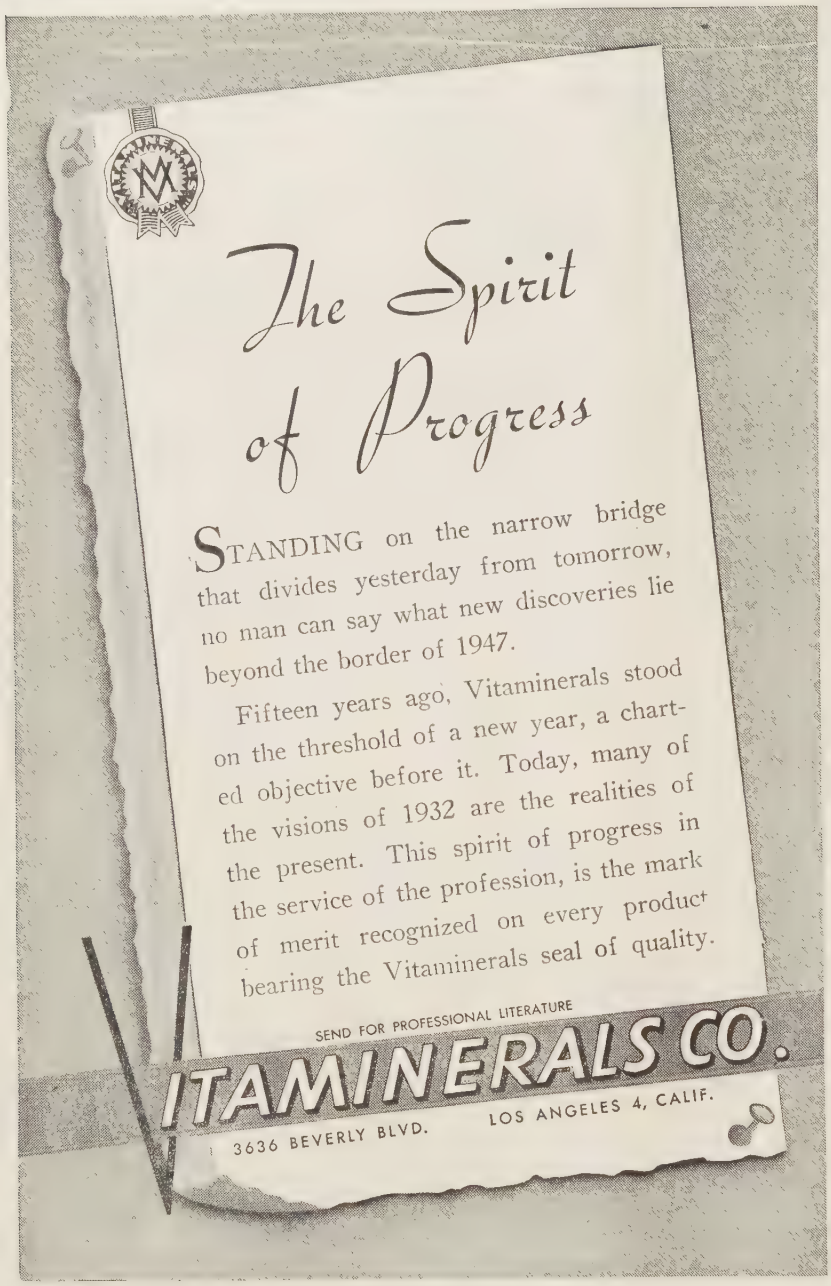
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Vaccine Against Poliomyelitis

Dr. Carl F. Meyer, University of California, director of the Hooper Foundation and this year's winner of the Sedgwick Memorial Medal, predicted at a recent meeting of the American Public Health Association, that a vaccine against infantile paralysis would soon be found. The disease can be controlled through a vaccine "which will imitate nature", he said. Experiments involving an ultraviolet irradiated vaccine are now being conducted with animals and show much promise. "If these methods hold true for human use, then the control of infantile paralysis will be a reality".

Health Conditions in New York State

The health record of the state of New York during the month of August was exceptionally favorable, according to *Health News*, October 14, 1946. Compared with the figures for the same month of year, the number of births increased by six thousand seven hundred and deaths decreased by six hundred. The birth rate, 22.6 per one thousand population, was the highest in twenty-five years, while the death rate, 9.5, was with but three exceptions, the lowest experienced in any month. Infant mortality, twenty-nine deaths under one year per one thousand live births, equalled the monthly minimum. Maternal mortality, ten deaths per ten thousand live and still births, was equally low only in the preceding July, when it dropped to the lowest point in the history of the state.

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The month passed without a single death from measles. Whooping cough was responsible for seven deaths and diphtheria for two, all of which occurred in the state, outside of New York City. In the entire state, thirty-two children under two years of age died from diarrhea and enteritis, and the rate, 0.8 per one thousand in this age group, was with one exception the lowest for the month.

The mortality from most of the other causes was generally as low, or lower than, ever before. The death rates from all forms of tuberculosis, 37.7 per one hundred thousand population, all forms of pneumonia, 21.4, diseases of the arteries, 17.4, syphilis, 7.3 and appendicitis, 2.7, were never lower. The mortality from heart disease, intracranial lesions of vascular origin, and diabetes declined from the high level of the preceding two years.

Antibiotics for Pneumonia

According to *Modern Medicine*, September 1946, the antibiotics A-10 and A-105, obtained from soil, were found by Dr. Albert Kelner and associates of the University of Pennsylvania, Philadelphia, to be beneficial in treating animals with Friedländer's bacillus due to pneumonia. In vitro A-10 and A-105 are active against organisms that cause typhoid, paratyphoid, dysentery, cholera, anthrax and tuberculosis. Fifty times a remedial dose is required to produce toxicity.

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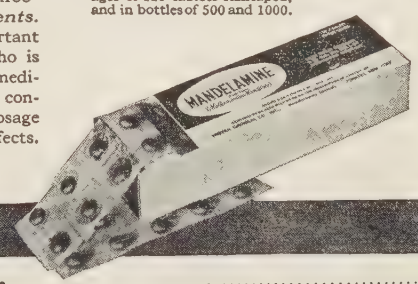

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EACH FLUID OUNCE CONTAINS 1 GRAIN CODEINE PHOSPHATE (OPIUM DERIVATIVE)
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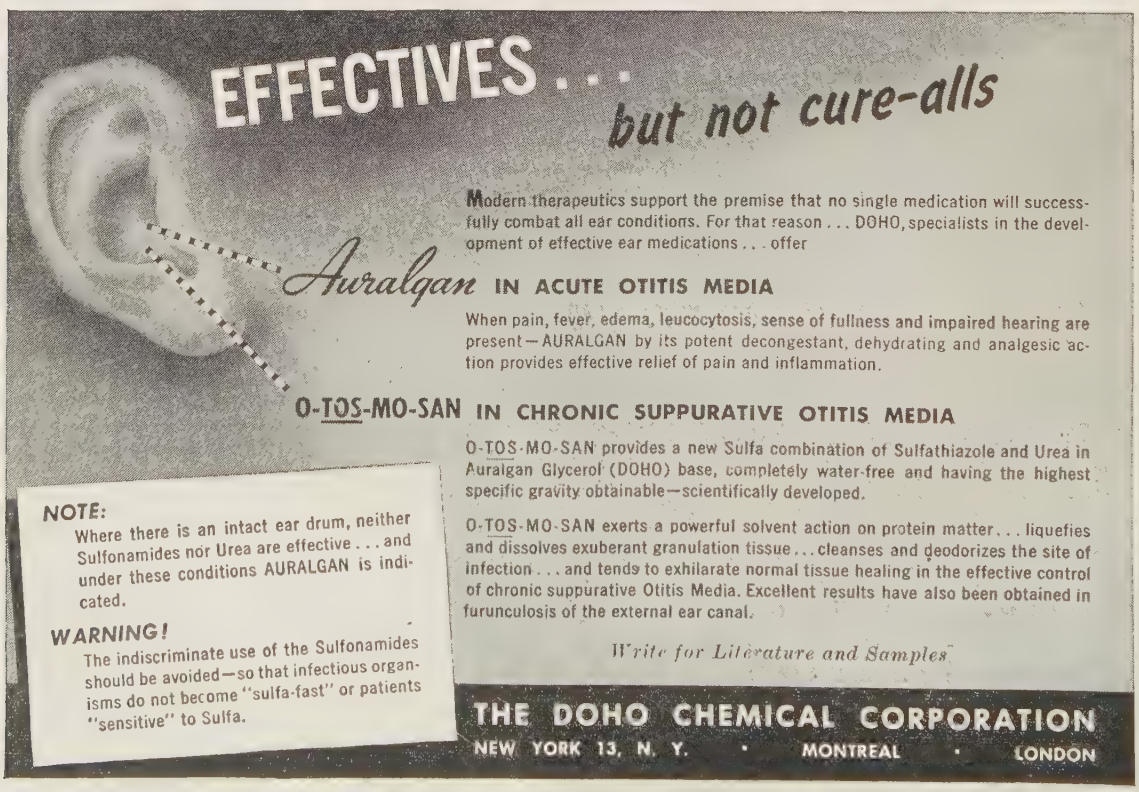
Lasker Awards

According to *Health News,* November 25, 1946, the Lasker Awards for medical research and public health administration were conferred by the American Public Health Association for the first time and will be presented annually in the future to individuals and groups. Recipients of individual awards this year were: Dr. Carl Ferdinand Cori, Washington University School of Medicine, for contributions to our knowledge of carbohydrate metabolism, culminating in clarification of insulin action; Dr. John F. Mahoney, senior surgeon, United States Public Health Service, for distinguished service as a pioneer in the treatment of syphilis with penicillin; the late Dr. Karl Landsteiner, former Nobel prize winner, and his collaborators, Dr. Philip Levine, Newark, N. J., and Dr. Alexander S. Weiner, Brooklyn, N. Y., for the discovery of the Rh factor and its significance as a cause of maternal, prenatal and neonatal morbidity and mortality; Dr. Alfred N. Richards, University of Pennsylvania, for distinguished achievement in the promotion of public health through the chairmanship of the Committee on Medical Research; and Dr. Fred L. Soper, associate director of the International Health Division of the Rockefeller Foundation, for organizing and directing eradication campaigns against yellow fever and malaria.

Group awards were conferred on the United States Bureau of Entomology and Plant Quarantine, for its work in controlling insect-borne diseases, particularly its research on DDT; The Army Epidemiological Board, for distinguished service in the control of infectious diseases; The National Institute of Health, in recognition of its fundamental contributions to the prevention and control of disease; the Northern Regional Research Laboratory, for studies leading to the mass production of penicillin; and the Board for the Coordination of Malaria Studies, for fundamental contributions in the field of malaria control.

In presenting the Lasker Awards, Dr. George Baehr, chairman of the Lasker Awards Committee composed of nine of America's foremost medical authorities, urged the members of the association to familiarize themselves with the details of the important projects in recognition of which the awards were made. "They are expected to have a far-reaching influence on the control of the diseases which are among the chief causes of morbidity and mortality."

Gibert's disease.—Camille Melchior Gibert first described pityriasis rosea, which bears his name. He was an energetic representative of the Willan system in France, and recognized the importance of parasitic diseases among school children. Gibert was born in 1797 and died in 1866.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Diabetes

Herbert H. Marks, of the Metropolitan Life Insurance Company, predicted at a meeting of the American Diabetes Association that diabetes will strike three out of every one hundred of the present population.

There are about twice as many diabetics in the population now as in 1920, the year before the discovery of insulin. Two out of every one hundred deaths in Canada and more than two out of every one hundred deaths in the United States are caused by diabetes, Mr. Marks reported. Diabetes now kills more people than pneumonia or tuberculosis.

Following the discovery of insulin, many physicians as well as the general public were disappointed to find the diabetes death rate going up instead of down. The reason is that insulin does not cure or prevent diabetes, Mr. Marks explained, and therefore could not stop the upward trend. The number of diabetes cases is ten or twenty times as great as the number of infantile paralysis cases. It exceeds in many states the number of tuberculosis cases. Diabetes occurs almost as often as cancer. There are well over one million diabetics on the North American continent.

The diabetes death rate has now, fortunately, turned downward, Mr. Marks reported. The rate in the period 1941-1945 is still ten percent higher than in 1920-1922, before insulin was discovered, but the 1945 rate among Metropolitan industrial policyholders was twenty-seven percent below the peak figure in 1940.

the lady regrets . . .

. . . a headache again today . . . another cancelled engagement . . . "head colds" and resultant sinal infections, most frequent in winter, cause many victims of chronic sinusitis to seek their Doctor for relief from the accompanying dull, heavy, depressing headaches that disturb social, business and family activities.

Too often therapy aims at only temporary symptomatic relief . . . analgesics for the relief of pain . . . "shrinking" agents to relieve, temporarily, the pent-up pressure.

DPS Formula 80 (Chlorophyll Solution), a non-toxic, non-irritating solution, offers not only relief from pent-up pressure, but through mildly bacteriostatic action, inhibits infective organisms. It aids in healing the raw, inflamed mucosal surfaces of the sinuses, helping restore normal mucosa resistant to re-infection. Its value in both acute and chronic sinusitis has been clinically proved.

Gruskin, in reviewing chlorophyll's value in these cases, quotes Ridpath and Davis who treated over 1000 cases. In cases ranging from mild acute coryza, through associated acute sinus infections, to chronic rhinosinusitis, the report states that "not a single failure seems to have occurred in this rather extensive series",[1] in which chlorophyll solution was used.

[1] Gruskin, Benjamin: *Chlorophyll, Its Place in Acute and Suppurative Disease,* Am. Jr. Sur. 49:49 — July, 1940.

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Penicillin Aerosol Therapy

Major General Alden H. Waitt, chief of the Chemical Corps, recently revealed in Washington that penicillin mists were part of the research program of the Chemical Warfare Service, now the Chemical Corps, for the treatment of lung casualties due to taxic gases and bacterial infections during the war.

The announcement coincided with the awarding of the Legion of Merit to Dr. Harold Alexander Abramson, assistant professor of physiology, Columbia University, and practicing physician in New York City, for his rôle in initiating and supervising the penicillin aerosol therapy program. Dr. Abramson, who was returned to civilian life with the rank of lieutenant colonel, was presented the award at a ceremony in the Pentagon Building, Washington, D. C. The ceremonies were attended by Brigadier General Earl S. Hoag, deputy director, War Department General Staff for Research and Development; Colonel E. C. Wallington, executive officer, Office of the Chief of the Chemical Corps and other members of the staff of General Waitt.

Early in 1942, Dr. Abramson conceived the idea that there was a possibility that aerosols could be used in the treatment of lung casualties; that is, victims of toxic gaseous agents. Major Abramson was appointed chairman of the aerosols committee, and he recommended that clinical studies be undertaken in that field. The problem was expanded in scope to include the possibility of treating secondary infections (pneumonias) by means of aerosols.

According to the army statement, "it was recommended that this work be done by the medical research division, Chemical Warfare Service, which could not be accomplished because this type of work was outside of the fields of responsibility of the Chemical Warfare Service. Major Abramson's persistance on this project led the Long Island Biological Association, Cold Spring Harbor, L. I., N. Y., to undertake an extensive research program in this field. The work, under Major Abramson, was done at Cold Spring Harbor with Dr. Vernon Bryson, on penicillin aerosols. Much acclaim has come to Dr. Bryson, who has published a recognition of Major Abramson as the originator of this idea."

Major Abramson provided the driving forces behind this important work, and it was at his suggestion that the Surgeon General's Office adopted an aerosol for treating lung obstructions. He worked long and diligently on this project, and he himself devised, invented, designed and developed a nebulizer (atomizer) for the administration of aerosols in secondary infections.

The use of penicillin aerosols and of Major

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THE frequency with which the menstrual life of so many women is marred by functional aberrations that pass the borderline of physiologic limits, emphasizes the importance of an effective tonic and regulator in the practicing physician's armamentarium.

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Abramson's plastic nebulizer has been widely accepted in the medical profession both here and in England, and today is routinely used in this treatment.

The army announcement revealed other contributions to the war effort of Dr. Abramson; including work as chairman of the National Defense Research Committee-Chemical Warfare Service, on the thickening of mustard gas, on studies of incendiary fuels and in the field of protective equipment. He instituted the electron microscope method of studying the function of filter materials in the gas mask canister, which resulted in the discovery of more efficient filter materials.

Dr. Abramson's activities also took him into the field of meteorology. At Edgewood Arsenal, he performed outstanding research work in studying the effects of changes in meteorological conditions on the dispersion of gas and other toxic agent clouds. On the basis of these studies "adequate and proper expenditure tables for chemical munitions were finally devised and published."

Jadassohn's disease.—Anetoderma erythematosum is known as Jadassohn's disease, and is named after Josef Jadassohn (1863-1936), a German dermatologist who was a pupil of Neisser, and himself a teacher of high reputation.

State Food-Drug Laws

Dr. Frederick J. Cullen, executive vice president of the Proprietary Association of America, in a recent speech before the South Atlantic Drug Club at the Piedmont Hotel, Atlanta, Ga., urged the enactment of state food and drug laws which are uniform with the Federal Food and Drug Act, plus a vigorous enforcement of the state statutes.

At the same time, Dr. Cullen noted a great improvement over the past decade in the standards of advertising and labeling of packaged medicines, and he called upon the industry to increase its already large expenditures for scientific research.

Pointing out that medicinal preparations sold within certain states escape the strict standards imposed on nationally distributed medicines, Dr. Cullen said that "much improvement could be brought about if state food, drug and cosmetic acts were enacted which would be uniform with the federal law and then vigorously enforced."

Dr. Cullen added that "a study of labels and advertising used in 1933 and 1934, in comparison with those used today, will show, in the majority of instances, that there has been a decided improvement." Further, he observed that "labeling and advertising of drug products were being improved upon even before enactment of the Wheeler-Lea amendments to the Federal Trade Commission Act and the passage of the 1938 Federal Food, Drug and Cosmetic Act."

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Fellowships in Medical Research

Dr. Thomas Parran, Surgeon General of the United States Public Health Service Federal Security Agency, recently announced that approximately one hundred and twenty one-year fellowships in medical research are open to men and women who are graduate science students. These fellowships are part of the program of the National Institute of Health, a unit of the Public Health Service.

A war-created void in scientific manpower offers unlimited opportunity to trained personnel in the public health field, Dr. Parran pointed out. He declared it would take five years or longer to make up the shortage of scientists. The National Cancer Institute, which operates as a division of the National Institute of Health, also has funds to train approximately thirty physicians in the diagnosis and treatment of cancer. Under a federally financed program, doctors wishing to specialize in this field may be appointed as trainees and be assigned to authorized nonfederal, nonprofit institutions in various parts of the country. The National Institute of Health offers research fellowships to graduates of accredited colleges who have majored in such subjects as biology, chemistry, dentistry, entomology, medicine, physics and other scientific fields. Paying a yearly stipend of $3,000, Senior Research Fellowships are awarded to men and women who hold Ph. D. degrees in one of the specified scientific subjects. Junior Fellows, who receive $2,400 annually, must hold a master's degree in science, or must have completed the equivalent of a master's degree in postgraduate study. Fellowships are for one year from the date of award, and may be renewed for a second year.

Applications for fellowships and traineeships should be sent to the Director, National Institute of Health, Bethesda, Md.

The Public Health Service also administers fellowships awarded by the State Department to health personnel from other American republics and the Philippine Islands. Between now and the end of 1947, one hundred fellowships will be available to qualified residents of the Philippines. From fifteen to twenty fellowships are open through June 30, 1947, to professional persons from other American republics. Applications for these fellowships should be sent to the Surgeon General, United States Public Health Service, Washington 25, D. C.

Eichstedt's disease.—The year Howe patented the sewing machine, Eichstedt established the relation between pityriasis versicolor and the Microsporon furfur, hence Eichstedt's disease. The parasite was christened by Ch. Robin. Eichstedt died in 1892.

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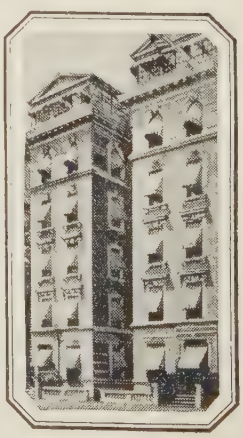

New Technique in Health Education

A new technique in health education, which will utilize specially prepared films for supplementing a popular textbook used in college freshman hygiene courses and adult education groups, was recently revealed by McGraw-Hill Book Company, Inc. Marking its entry into the educational film field, the company has started production of a series of seven 16 mm. sound motion pictures and a like number of coordinated silent filmstrips on vital health subjects. These text-films are designed to correlate with, and supplement the subject matter of *Textbook of Healthful Living* by Dr. Harold S. Diehl, dean of medical sciences, University of Minnesota. They will be ready for distribution some time next spring. Instructors' manuals will also be provided, with suggestions on making effective, integrated use of these teaching materials.

Collaborating with Dr. Diehl in providing technical assistance in this film program are Dr. William A. O'Brien, director of postgraduate medical education; Dr. Ruth E. Boynton, director of students' health service and Dr. Ruth E. Grout, professor of public health and education, all of the University of Minnesota. The films are being produced under the direction of Albert J. Rosenberg, manager of the recently created text-film department of McGraw-Hill.

Selection of film subjects has been directed to those parts of the course most difficult for the student to understand, as determined from replies to a questionnaire sent to users of the text, and to those parts of the book that can be more effectively presented in the visual medium. The films will employ the same approach to the subject and the same terminology as the book, but will go beyond the book treatment by presenting additional information and taking advantage of the inherent expository capacities of the film medium.

Subjects of the seven motion pictures are: Body care and grooming; personal health; care of the ears, nose and throat; group and public health; immunization and vaccination; sex education and mental hygiene. Presentation in the films is entirely factual, with no attempt to plead any cause, point any moral or promote any health fad. The aim of the films is simply to extend the coverage of the textbook in setting forth the more significant available information concerning the preservation and improvement of health.

Each motion picture will be accompanied by a coordinated silent filmstrip, or slide film as they are sometimes called. However, the motion pictures and filmstrips are each designed to be functionally different. The motion pictures provide a realistic explanation of fundamental health precepts, and dramatize recommended procedures for good health maintenance. Wherever it seems desirable for better understanding of body functions and the processes of health protection, the motion pictures utilize animated drawings and photomicrography. Thus, motion pictures will help the student to visualize what is normally difficult or impossible to see.

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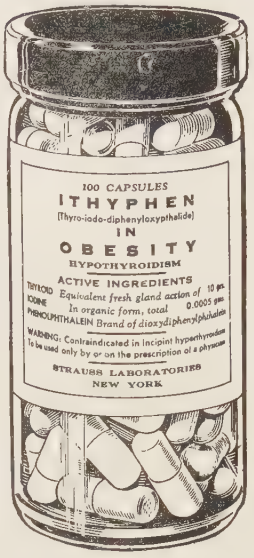

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American Trudeau Society

The Veterans Administration has announced that fifteen Veterans Administration consultants and specialists in tuberculosis were among the seventy prominent physicians selected by the American Trudeau Society, which is the medical section of the National Tuberculosis Association, to serve on its national and regional committees on postgraduate medical education. Dr. Paul R. Hawley, chief of the Veterans Administration's medical service, said that the selection of these physicians to serve on these committees is an outstanding recognition of the types of men who today are serving the Veterans Administration as consultants in tuberculosis and fulltime in tuberculosis service.

Vitamin Research Urged

Dr. W. H. Sebrell, chief of the division of physiology, National Institute of Health, recently told the National Vitamin Foundation at its first dinner meeting at the Waldorf Astoria Hotel, New York, N. Y., that considerable scientific research on vitamins must be undertaken in order to "furnish the foundation for the proper, rational and adequate usage of vitamins in public health and the practice of medicine."

At the same time, Dr. Robert S. Goodhart, scientific director of the foundation, announced that its board of governors had approved a program involving nine grants-in-aid totaling $34,300, for vitamin research at hospitals and universities.

"It is still going to be some time before we will have an accurate and continuing record of the extent of disability from malnutrition in this country. We need more knowledge—much more knowledge." Dr. Sebrell referred to "the need for teaching nutrition to physicians. Even today the teaching of nutrition in most medical schools is inadequate," he said.

"Nothing pays larger dividends in public health benefits than fundamental research in nutrition," Dr. Frank G. Boudreau, director of the Milbank Memorial Fund, told the members.

"The application of nutrition research can reduce prematurity almost, if not quite, to the vanishing point; it can prevent many of the accidents and toxemias of pregnancy; it can reduce infant and child mortality; and if we can apply the results of research in rats to human beings, it can lengthen the span of man's useful life by several years," Dr. Boudreau concluded.

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by DANNY KAYE

To avoid saving money, the first thing is cut off all your pockets. Thus you will have to carry your money in your hand. Which will insure that you—1. spend it, 2. lose it, 3. get it taken from you—*quicker!*

Also avoid piggy banks. The kiddies in particular are victimized by such devices, often saving quite a bale of moolah. And be sure to avoid budgets or, before you know it, you'll be in the black!
It is best to draw your pay and walk down Main Street buying anything you don't particularly hate.

Above all, don't buy any U. S. Savings Bonds—or it's *impossible* not to save money! These pay fat interest—4 dollars for 3 after only 10 years! There is even an insidious Payroll Savings Plan which is *automatic*. With it, you may even find yourself embarrassed by a regular income! Get-gat-gittle!

Danny Kaye

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"Broncalloy" Instruments

A major advance in the manufacture of endoscopic instruments has recently been announced by George P. Pilling & Son Company, Philadelphia instrument makers. Now certain instruments, formerly produced only of brass, are manufactured of a stainless, durable metal, "broncalloy".

These new instruments were introduced to the medical profession at the recent joint meeting in Chicago of the American Academy of Ophthalmology and Otolaryngology and the first Pan-American Congress of Otorhinolaryngology and bronchoesophagology.

"Broncalloy" instruments are said to have the advantage of far greater strength and rigidity, without appreciable sacrifice of the diameter of the lumen. The greater rigidity of the bronchoscope facilitates its introduction into the larynx without the laryngoscope, and aids in complete lumen exposure of the upper lobe bronchi. Being practically indestructible and corrosion-resistant, the instruments will require a minimum of repairs. Despite these superior features, the cost of "broncalloy" instruments is only fractionally higher than that of instruments made of softer metal.

"Broncalloy" instruments now available include bronchoscopes, esophagoscopes, suction tubes, sponge carriers, cannulated forceps, etc., as designed and used by other recognized authorities.

Safety Device

A bottle carrier, that will aid in preventing accidents and burns in laboratories and industrial plants, is now being made by the United States Rubber Company, according to a recent announcement. Lightweight and shockproof, it is designed to carry glass bottles containing such chemicals as acids, caustics, dyes, stains, inks and other liquids. The new safety device, according to the manufacturers, will help prevent accidents, severe burns and cuts from flying glass caused by dropping glass bottles containing harmful chemicals.

The protective bottle carrier is available in two sizes, a gallon size and a five-pint or two-liter size. The outer bag is made of heavy duck, impregnated on both sides with chemical-resistant synthetic rubber. All seams are vulcanized. Carrying straps of double thickness, run completely under the carrier so that the load is properly distributed and supported. A locking device on the drawstring keeps the carrier closed and prevents splashing. Other safety features include a firm disk base, a rubber sponge shockproof pad to protect the bottom against blows and a tubular sponge rubber side padding which completely surrounds the bottle. All are removable for cleaning.

Benson and Associates of Chicago are the distributors of the protective bottle carrier for the United States Rubber Company.

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